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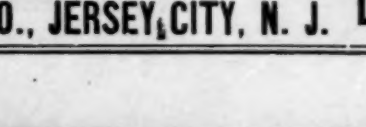

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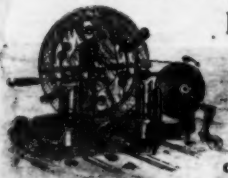
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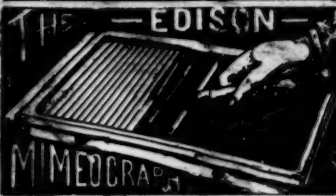
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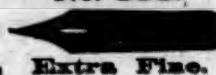
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DR. D. J. WALLER, present principal of the state normal school, located at Bloomsburg, Pa., has been appointed, by Gov. Beaver, as state superintendent of public instruction. He has accepted the position, and thus the state secures a man well fitted for the place, one who has a clear comprehension of the educational needs of Pennsylvania. He has administered the affairs of his school with a Christian manliness, and ability and firmness. Every student who has attended the school has been lifted to a higher level by his example.

THERE is a rising interest in the discoveries of Delsarte. Few know that he was a genius, in his way, as much as Shakespeare. The supposition that he would teach persons to walk and talk and move in a certain way is a mistake. He would, if possible, renovate the character by means of art. His words are:

Art should interest by the true.
Art should move by the beautiful.
Art should persuade by the good.
Art should

Interest by the true to illumine the intelligence,
Move by the beautiful to regenerate the life,
Persuade by the good to perfect the heart.

His idea that the body is the organ of the soul leads to another, that to harmonize the life the body must be trained; to educate the body means to give the soul the means of expressing itself.

A PUBLIC meeting in this city to discuss public education shows that the people are beginning to do what, we believe, in time they will do a great deal of. We predict that the time will come when the public will have a good deal to say about education; we believe the Republican party is thinking seriously of making education one of the planks in its next platform.

The meeting in this city discussed the need of more accommodations for the (so called) grammar pupils. The board of education is at every meeting pressed to increase the number of buildings.

A CALIFORNIA superintendent remarks: "We shall be obliged to recast our examination of teachers to suit the new 'all-round teaching' that is apparently going on at the East." Evidently the style of examination that has been in vogue will disappear—or very much of it. Teaching is an art; it is the art of educating and so the questions will be such as to determine whether the teacher has acquired the art of educating.

Now all this means that the teacher will become a better scholar, no doubt; the university extension shows this, but the great fault has been that the examination has only shown that a certain amount of knowledge has been acquired—and the examinee was fitted equally for the post-office, custom house, or school house.

The effort to make teaching a profession will also inaugurate a new style of examination and by new men.

1. The examination for state certificates should be by the normal school principals, and just what the graduates from those schools should sustain.

2. The examination for the "undergraduate certificates" should be by the school commissioner or county superintendent, the questions being sent by the state superintendent. These questions, we think, should be constructed by the normal school principals as an "examining board."

3. We should like to have the president of the state association put on this examining board. And also the president of the county association on a "county board of examiners" of which the school commissioner would be chairman.

In other words we think this business of examining should in fact, at least, be in the hands of the teachers. What do you think?

A PRINCIPAL of very much experience and success lately remarked, "I have had a teachers' meeting for the past twenty-three years; it is held every week; perhaps in that time two or three omissions have occurred each year. I am not chairman except as I take my turn. There is a secretary who records the attendance. The time is Monday afternoon from half-past three to four.

First, the secretary reads the minutes of the last meeting; these are very brief. The subject is announced. Here are some of the subjects:

Recess or no recess?

Friday afternoon examinations or not?

How to create an interest in reading good books.

To use set copies or not.

As to collections of objects.

As to the county institute.

Keeping of the school.

As to an ideal course of study.

One teacher reads a paper on the subject; this paper is 'put on file,' that it may be looked at or published. Then each rises and speaks on the subject just as he or she thinks. Then the subject two weeks ahead is named; each copies it from the blackboard (a list of subjects was selected at the first meeting, for the entire year), and we separate. Sometimes we do what we need in twenty minutes.

If I want to speak as to methods of teaching, etc., I do this to the teacher, separately. These meetings

are to brighten us up on educational topics. At the county institutes my teachers are marked people. They can get up and talk; there is no subject they do not have ideas upon.

Of course we take and read papers and THE JOURNAL is our Bible. Every teacher has some books on teaching; the best book is 'Parker's Talks.' Then we have a library of thirty volumes that belongs to the school; it was purchased by subscription."

IN 1883 a number of citizens in Elmira, N. Y., formed an educational society. Its object as stated in seven words was: "To consider wholesome conditions of mental growth." We understand the society has been flourishing and useful. It is not composed of teachers; it is not designed for teachers; it is for the benefit of the children.

Now we urge all teachers in communities of five hundred and upwards to take steps to organize such a society. One of the main reasons is that, aside from disseminating knowledge concerning education, it will be a source of strength and backing for good teachers who are mistreated by a school-board. A school-board should be the officer of the public, but too frequently it is actuated by the meanest kind of petty spite. If the story of the meannesses of the school-boards of the country could be written it would be set down as fiction. Their day has not wholly passed away.

But the teachers should put defences around their profession. A society of men and women who discuss education, visit schools, and appreciate the work of the teacher would be a haven of refuge to many an oppressed worker. If leave he must, he could carry with him the statement of this society that he is "a good and true man." Such a society would operate to raise the standard of teaching in many ways, so that we urge the founding of one in every community.

ARE we well educated? Some question this.

For example, at a hotel in the Catskills, a lady was introduced to another, and they sat down to converse. The next day the latter remarked to the writer, "Did you say she was a teacher? And in one of the public schools of New York?"

As a reason for her doubts of her capacity for such a trust as she seemed to have, she said, "Why she does not know how to speak English. She said, 'Them's the ones,' 'I seen her,' 'It don't pay' in the few minutes I talked with her."

Now this charge, while true of one, may be true of all—of course it is not. But then it is true of a good many; we may as well admit it. So that the question whether the teachers form a well educated class is a perfectly proper one. We regret to admit that very many are uneducated in a broad sense. The amount of criticism that goes on behind the backs of the teachers would surprise them if they could hear it.

What constitutes an education? The teacher must not conclude that if he knows all he is required to teach, he is educated. That only indicates that he has begun to get an education—merely begun it, note. It has been one of the sins of THE JOURNAL that it has spoken plainly on this subject, and that it has urged the teacher to go home, not to crochet or smoke, but to add to the knowledge already gained. This advice is not nearly so distasteful as it used to be. There is a growing spirit of progress; we see it in the letters that are laid upon our table, we hear it in the streets; and so, while we admit the teacher is not now educated, we think the time is coming when he and she will be. There is a spirit abroad that is most admirable. Not alone here, but in Texas, New Mexico, Dakota—and teachers are joining reading circles or summer schools, and planning to get up higher.

TRAINED TEACHERS AND BETTER PAY.

Assemblyman Curtis of this state has introduced a bill increasing the salaries of country school teachers. This he proposes to do by increasing state taxation. Concerning this suggestion, *The Tribune*, of this city says: "Though it cannot be denied that most country school teachers are poorly paid, it must also be admitted that most country pupils are poorly taught." In the recent Iowa state association, the heart of the whole meeting was roused, so the report states, "as if by magic, by a country school ma'am from the southeastern part of the state, who, in words few and cutting, laid bare the actual condition of the country schools, and lifted the veil which covers the skeleton in the public school system." The report proceeds to say that "the association is beginning to realize that the work of reform most needed now is not in the high schools."

In close connection with this subject was the recent lecture of Supt. Maxwell, of Brooklyn, on "Trained Teachers." He maintained that all persons appointed to teach in public schools should be trained teachers, and that it was the duty of the state to see that the requisite facilities for training teachers should be provided. He discussed the evils of employing untrained teachers, and said that of the 6,000 teachers to whom certificates were issued yearly in this state, only one-quarter are trained. There are a few cities of the state, in which only trained teachers, or teachers of experience, are appointed. There are some, however, in which not even the pretense of training is made, such as Troy and Utica. In New York City fully 25 per cent. of all the new teachers appointed each year have had no professional training. In Brooklyn the number of untrained teachers is not less than 75 per cent. of the new teachers appointed.

Supt. Maxwell maintained that there can be no question as to the right of the state to dictate what qualifications public school teachers should possess. He also said that since the great mass of people cannot be trusted to provide the requisite means for the education of their children, the state should take the whole matter in its own hands. He referred to the action of the state council of city superintendents, suggesting that the legislature should provide that, after a certain date, no person not previously legally licensed and employed in teaching shall be licensed to teach in any public school in any city or incorporated village or union free school district, employing in each case a superintendent of schools, who does not hold a college degree, or who has not in addition to the scholarship now required for a teacher's certificate, received at least forty weeks' instruction in the theory and practice of teaching in a properly organized normal or training school class.

In what is here presented there is much food for thought. The following facts appear plain:

The field of educational reform is in the primary school.

Trained teachers are needed in all grades, just as much in the primary and ungraded district schools, as in the city schools.

The state should require special professional preparation of all who draw public money.

MORE SCHOOL-BUILDINGS NEEDED.

The masses in New York City are evidently deeply interested in the condition of the public schools. Last week the great hall of the Cooper Union was filled to overflowing by those in attendance at the mass-meeting of the "School Conference of New York." They declared that our school accommodations are worse than those of any city in the Union; that the cost of the machinery of repression (armories, police, courts, asylums, etc.) far exceeds the expenditure for schools; that the appropriations for the schools have borne no proportion to the increase in wealth or population. This is shown from the fact that since 1880 the assessed valuation of property in New York City has grown by more than half a billion dollars. During the same time the annual expenditure for schools has increased by less than a million dollars, and is now less than five million a year, out of \$35,000,000. They also declared that the number of children receiving no school training during the present year must exceed 100,000, and that twenty thousand children actually applying were turned away last year; 3,500 children already admitted were turned out because in excess of accommodations; and the attendance was actually less than in the preceding year; that the primary schools are the people's schools *par excellence*; therefore, there is flagrant discrimination against the primary children and in favor of the children who attend the higher grades; for despite the efficient

work done by the primary teachers, their salaries are the lowest, and none of the teachers has a pension, such as is granted to the police and fire departments; that the Compulsory Education bill, now before the legislature is practically worthless, for the above reasons, and others. These are facts, much as we regret to say it. What do our thinking readers say to them?

The meeting passed resolutions favoring a law that would make compulsory education effective, regardless of expense. If such a law can be devised, well and good; other states have tried it with varying success.

THE BASIS OF EDUCATION.

Without doubt it is the brain, but if another answers the mind, he is right, for the mind cannot act at all except through the brain, and it cannot act well unless the brain is in good physical condition. The health of the whole body affects the mind through the brain. So the ultimate basis of education is physical health. We all know this, but few obey the lesson it teaches. We stuff ourselves to repletion, at a good dinner in the evening, as a preparation for an after-dinner speech, or a hard day's work in the school-room. We must eat, but our eating may be a hindrance to our thinking, and then again it may be a help to it. It should be a help. So gymnastics may be a hindrance, and it may help; it should always help. A man once wrote a poor book under the good title, "The Physical Basis of Education." Somebody should now write a good book on that subject, for we must all admit that we are in the body, and that we must work from within its limitations.

In no one particular do we injure our minds more than through our nerves. These little cords, of which the brain is only a ganglion, are wonderfully sensitive to mental action. How quickly will bad news send the cold shudders all down the back. How quickly will the flush of disappointment cover the face, when another has won the prize that seemed just within the grasp. When the teacher pricks and goads his pupils to unlimited exertion, he should know that he is straining their nerves to the highest tension, and that some of them are certain to be injured for life. The approaching examination may be especially brilliant, but what of the nerves? What of the nerves! Why are we a nervous people? It is easy to see. Our slow-going grandfathers had time enough to attend to everything and not hurry. But times changed. The walk became a trot, and then a canter, and finally a run. Now, the whole world is on the keen jump, and how fast it will go, before another generation, we cannot tell. But all of this is knocking out all the underpinning from the basis of education. It is making us a nervous, weak-kneed people. Children carry more books home for evening study than they can comfortably lift. Instead of the hop, skip, and jump of boyhood and girlhood, we have sober-faced, wan, tired, and often discouraged young men and women. The result is, we get into the cares of life before we get out of our teens. We make education a means for the future, and not an end for the present. It has been recently said that "a professor of physical culture in one of our advanced colleges states that the energy of students is so entirely consumed by the intense mental application required of them that, bad as the alternative is, it is better to let them off without gymnastic exercise" (and this means substantially no exercise), "than to draw further on their exhausted vitality."

There is truth here that teachers should take into their souls, and let influence their actions. We must stop this eternal talk about mind training. It is nonsense to make it the means, when it should be the end. We are in the body, and it is the basis—yes, under the basis—of all real education.

THE new school committee in Boston, which was elected upon the question of retaining or rejecting a certain school history, has just done that which the election declared it should do. The matter in dispute, it will be remembered, was the rejection of the Swinton history, owing to a paragraph offensive to Roman Catholics, and the adoption of Anderson's in its place. The election last fall was a condemnation of this change.

The committee on text-books reported in favor of dropping Anderson's histories, but not substituting any books in their place. That is to say, they found it so difficult to provide teaching that would suit all sects that they voted to leave the children of Boston in ignorance as to mediæval and modern history, by omitting from the list of authorized text-books all histories except the ancient. This report the school committee refused to adopt, and by a decisive vote it was ordered that Myers' General History be used in the Boston schools after July 1 next.

WHAT LANGUAGE SHALL WE SPEAK?

That which we teach in our public schools. No other. We shall learn, by and by, that it is hard enough to lead pupils to speak, read, and write one language correctly. Two tongues would confuse them beyond the power of remedy. The recent decision of the state superintendent of public instruction for the state of Minnesota, is correct, that all instruction in the public schools of that state during the hours prescribed by its laws must be in the English language, and that a violation of these instructions by a teacher, will work a forfeiture of wages and position.

These facts, says the *Evangelist*, and others of a like character, seem to indicate a return to the old position, that as English is the language of this country—the language in which its Constitution and laws are written—it is the only language for whose teaching in our public schools the public should be taxed; and that neither in the high school nor the public school should the German or any other foreign language be taught within the prescribed school hours, or at the expense of the taxpayers. If one foreign language can be taught at the expense of the public, why may not any foreign language that the parents or guardians of a pupil may wish that pupil to learn?

These opinions seem to us to be sound.

PLAIN living has been the teacher's necessity, but it will be his privilege. The object of his living will be his thinking and working. Thackeray changed Wordsworth's "Plain living and high thinking," to "high living and plain thinking." The teachers in the future will continue to follow Wordsworth, not from necessity, but from choice. We are learning to think less of eating and drinking, and more of doing and being; of what we are, and not what we have. The school that has a thinker at its head, has one who cares far less for a good dinner than for a good character; far less for the payment of his salary than for his real success as a creator of minds and hearts.

PRESIDENT LOW thinks that colleges do not interfere with one another. He is right. But he is also right in making a distinction between a college and a university. The people have been so accustomed to hear a college called a university, that they fail to discriminate between the two, often using the two words synonymously, whereas there is a broad distinction between them. President Low thinks the name "Columbia College and University" would be more appropriate than the present one, and it would. The college is only an extension of the classical high school and academy. It is only when a student has graduated and entered upon a higher course of liberal study, that he begins to do much towards fixing his life work. Technical schools do not belong to a liberal system of education. They are special. University work should be free, elective, and without restrictions except as to final tests, which should always be according to results, and not after technical tests. When a student shows, by what he has done, that he is worthy of university honors, they should be given him, and not until then.

SENATOR EDMUNDS has introduced a bill to provide a public school system for Utah, his ultimate object being to supplement previous legislation of his authorship, and diminish the influence of the Mormon church. This, by-the-way, is the right way to go about it. If Mormonism is wrong, education will kill it more surely than all the repressive legislation that can be devised. Repression never kills a good religion; a bad one cannot survive education. Mr. Edmunds' bill provides for instruction in temperance, manners, and morals, but forbids the use of sectarian or denominational books. That is right too, and gives all a fair chance outside the public school, without favor within it.

FIVE Democrats voted for the confirmation of General Morgan, as commissioner of Indian affairs, and two Republicans against him. It is understood that Senators Plumb and Davis were paired with two other Republicans against the nomination. The fight against the general has been bitter, but the opposition failed to hold its own. The fight was full of personalities, the question of his policy not, apparently, entering into the contest. The confirmation of Gen. Morgan made the appointment of Dr. Dorchester certain.

HOW DO WE REMEMBER?

Professor Starr, of Columbia College, recently delivered a valuable lecture on this question, an abstract of which will be interesting to our readers. Prof. Starr said that some years ago it would not have been possible to answer it as definitely as it can be answered today. That anything more is known now is because the study of physiology has been joined to the study of psychology. There is a great difference in degree in the sense perceptions of different animals. A note which is too high for the human ear to hear may be heard by one of the lower animals. A mouse may cause a sound which no man or woman could hear, but which to the ear of a cat would be like a roar.

One of the most interesting discoveries in physiology has been the finding of the path by which the sensory perceptions are transmitted to the brain. Each sense has a part of the brain matter which belongs to and operates principally for that sense. The eye looks upon something, the optic nerve transmits the sight to the visual tract in the brain, and the visual tract receives the picture and stores it away to be more or less perfectly seen again. A sound strikes the ear, is transmitted by the auditory nerve to the tract devoted to the sensation of hearing, and there the sound becomes known. So, for the other senses, there are nerves communicating from the outer organ to the particular tracts in the brain. Memory is the recognizing faculty. There is a memory faculty for each sense. We should speak of memories and not merely of memory. A blind man, for example, has no sight memory. The eye or the optic nerve or both being impaired from birth, the man has never had an impression conveyed to the visual tract, and so the faculty of visual memory never having been used, there is no picture stored away there; there is nothing in that part of the brain to call up later.

To illustrate how the memory power in the various tracts operates, a recent experiment was made upon two dogs. The brain of one was bared, and that section owned by the faculty of remembering things seen was removed. Nothing was done to the dog's eyes or optic nerve, yet the dog was blind. It could look with the eyes, but the power of knowing what the eye was fixed upon, or of recognizing, or of remembering the sight was gone. In the case of the other dog, the visual tract was exposed, but only a portion was removed. Then the scalp was drawn over the wound, and the dog nursed to health. The result was that the dog was like a newborn puppy. Its acts of seeing were new. Objects which it had often looked upon, and which the dog recognized whenever before it had looked upon them, were now new sights. The removal of a part of its visual tract had destroyed its memory pictures. Formerly the dog had known how to put its paw in its master's hand, either when the master extended his hand or when he said, "Give me your paw." After the operation the master put out his hand. The dog did not raise his paw. He saw the hand, but did not remember what to do because his visual tract, wherein the sight memory had lodged, had been impaired. Then the master said, "Give me your paw." The dog raised it at once, because his auditory tract, wherein the sound memory lodged, had not been affected.

The first experiments of this sort were conducted by a Berlin investigator, and show that there are sets of memories which have definite fixed places in the brain, and that physiology knows where they are.

The degree of strength in the memory of effort depends upon one's power of association, and upon bodily conditions. A thing once put in possession of any of the memories is always there, and, strictly speaking, there is no such thing as losing possession of it. What we call "forgetting" is our inability to bring to bear such an association of ideas as will present before us the matter of previous cognition that is stored away in one of the brain tracts. A story of Hawthorne bears upon this. He was visiting a house, one room of which he thought he had seen before, yet he could not remember that he had ever been in the house or near it. All his effort at memory failed. Some time later it was discovered by friends that Hawthorne really had seen the room before, having been taken into it when only 14 months old. Another instance of one's having facts or impressions stored up in the memories that all effort, all intentional memory fails to recall, is that of the German servant girl about whom Coleridge tells. She was prostrated with a nervous fever, and was frequently delirious. During these times she repeated long passages from classical and rabbinical writings. Her recitations were fervid and exact, and those who heard her wondered greatly. Some listeners wrote down what she said, and

they were found to be literal extracts. The girl was illiterate, and no one could explain the curious incident. Inquiries were made concerning her history, and it was found out that she had lived in the family of an old and learned minister, who was in the habit of reading aloud favorite passages from the very writers in whose works these extracts were discovered. The sounds, which were perfectly unintelligible to her, had, nevertheless, been retained in the auditory tract; and, though all her intentional efforts to recall them would have failed, still, in the exalted mental state of delirium they were re-known. Our brains contain all the knowledge that we have ever acquired, though communication with it may be cut off.

A FEW PRACTICAL QUESTIONS,

FOR THINKING TEACHERS.

1. What is an idea?
2. Is a thought simple or complex?
3. What mental development must a child have before it can count intelligently?
4. Can a child analyze an example in arithmetic before it has the power of generalization?
5. How does the mental process of adding differ from the mental process of subtracting?
6. What powers of the mind must be developed before geography can be understood?
7. At what time in the course should the idea of ratio be taught?
8. Is abstraction necessary to the understanding of the four fundamental rules of arithmetic?
9. Illustrate what is the meaning of abstract and concrete arithmetic.
10. Have we abstract and concrete grammar?
11. Have we abstract and concrete geography?
12. Should abstract and concrete instruction go hand in hand from the beginning of school work to the end?
13. Which method of teaching is most commonly used by poor teachers, the abstract or the concrete?
14. What is the difference, if any, between *knowing* and *understanding*?
15. In education by doing, is it necessary to exercise the senses?
16. What is the mental process involved in teaching children to count by threes?
17. In view of reason and common sense, are there four fundamental rules? Why not five?
18. Explain the philosophical meaning of the expression "fundamental rule."
19. How many separate and distinct things can the mind apprehend at one time?
20. Which is the proper expression, "analyzing a number," or "analyzing a quantity"? State why.

THE EDUCATOR MUST KNOW THE CHILD.

By E. E. HAND.

Dr. Payne tells us, in his "Lectures on Teaching," that we should know the mind of the child, and in our reading circle work we have been saying it over and over with a masterly repetition that would do credit to the author himself; and realizing its full meaning about as much as the school boy who glibly recites, "The sun is 93,000,000 miles distant, and 866,000 miles in diameter."

What a microcosm that,—the mind of the child,—and what a world of experience and endeavor in the labor of knowing it! We realize this more and more as the years pass by and our narrow ellipses of experience enlarge. We have not half begun to know our own minds yet. We cannot certainly tell how they will think and lead us to act, under given conditions, until the circumstances are woven into our lives.

I have had my attention called to many "germ elements" of child life, in a course of illustrations and explanations of common things that I have been conducting for a number of years. For example, I enter a room containing 40 second reader boys and girls. Bright faces and eyes full of happy anticipation greet me as I come. I have a match, a glass jar, and two pieces of candle, one on a wire for lowering it into the jar. I talk to them a few moments about the match; find out how many remember the first time they ever saw one lit; what it is good for; what it is made of; what it will do when I rub it across a rough piece of stick; accidentally rub the wrong end, find out why it doesn't light, etc.

Teachers, if you think there is nothing for you to learn during such an exercise, try it, and you will agree with me that there is. You will find out that the match is made out of almost everything from powder to safe-

tida, and some of the bright little girls remember about blowing out a match when they were only eighteen months old.

Then, to see the inclination to get little bits of mystery and illusion mixed up in their explanations of simple phenomena! For them and with them, I wonder what makes the candle burn in the air as it does; and then we wonder what makes it go out when in the jar, and there is always some fantastical explanation given.

We have heard, ever since our school days, that a child never learns to doubt until he has been deceived; but either our seven-year-olds have been grossly imposed upon, or our pretty maxim is not true. Without touching the wick, light the gas as it escapes from the newly extinguished candle flame; ask why it lights and hear those little doubters explain: "The fire fell off the match," "It lit the smoke," "It ran down the wire," etc. Truly, teachers, a *terra incognita* lies before us, but our Columbus has crossed over to its Indian shores, and we have only to push through the tropical jungles, and subdue the little savage intellects, feelings, and wills, and civilization and enlightenment will follow in our wake.

THE REASONING OF A CHILD AND OF A JUDGE.

By MAY MACKINTOSH.

THE JUDGE BALANCES THE PROS AND CONS OF BOTH SIDES OF THE SUBJECT, WHILE THE CHILD SEES ONLY ONE.

The child reasons from a particular case,—or at most, from two or three such,—without the realization of underlying principles, that comes from a wider experience. He generalizes from insufficient grounds. Sully mentions a boy of two and a half years, who was accustomed to dwell on the fact that he would one day grow to be big. One day, as he was using a stick for walking, his mother told him it was too small, on which he at once remarked, "Me use it for walking-stick when stick be bigger!" He would grow bigger; therefore, so would everything else.

THE CHILD ASSIGNS EFFECTS WIDELY SEPARATED IN THEIR ORIGIN TO THE SAME CAUSE. He first realizes one particular cause; and not until he finds that insufficient to explain the varied events of his daily life, does he seek for others. Sully instances another child, who, after the wind had blown off his hat, attributed to the same cause the slipping off of his glove. This childish habit of inference that the causes of the known and of the unknown are identical, is also illustrated by another story told by the same authority of a girl of five, who asked if the wind was caused by "a big fan some where." This seeking for the cause of everything is a distinguishing mark of children's mind-processes; they being, usually, embodied interrogation points, as soon as they can at all express themselves.

Sully also notes that the use of the negative form, in strong contrast to the affirmative—"I am a boy, *not* a baby," marks a well-defined stage of development.

THE JUDGE MUST BE IMPARTIAL. There must be no mixture of sympathetic or antagonistic feeling with the operations of his mind. Everything must be consciously subordinated to reason. This is not, commonly at least, a natural state; it demands a direct action of the will to induce and to maintain it.

The child's reasoning lies directly between the effect and his own previous conceptions.

THE JUDGE OCCUPIES AN INTERMEDIATE POSITION BETWEEN TWO OPPOSING CONCEPTIONS OF OTHER MEN'S INTELLECTS, and his mind must receive these conceptions (to the suppression of his own), sift out the false contained in them and harmonize the true. Those desiring fuller information will do well to read Chapter X, of Sully's *Outlines of Psychology*, for the first part of the subject; and any standard law-book on the office and functions of a judge for the second.

LAST month I resigned my position in Pennsylvania, and accepted one here, with an increase of \$350 in my salary. I owe my success to THE INSTITUTE and other wide-awake journals.

Washington, D. C.

KATE H. BEVARD.

FROM THE AUTHOR OF "EDUCATIONAL REFORMERS."

I am obliged to make a general rule of avoiding periodicals, but to this rule there are a few exceptions, and among the four or five periodicals which I always look through, and to a great extent, is THE SCHOOL JOURNAL. It seems to me to advocate true education, and that very vigorously,

I am, R. H. QUICK

SOME GOOD QUESTIONS.

Among the questions proposed by the committee of the National Association on nomenclature and classification of manual "training work," the following seem to us especially good:

1. Should any regular shop-work except in wood be introduced into the grammar grades? Should this wood work include more than joinery and woodcarving?
2. Can edge tools, other than knives and scissors, be put into pupils' hands in regular school-rooms?
3. Are there any whittling exercises (*sloyd*) which have enough in them to justify their introduction into the school-room?
4. Should pupils be encouraged to try to learn the use of such tools as they can get, at home, without instruction?
5. Should shop exercises ever be executed from models alone, without drawings?
6. Should pupils, as a rule, have both models and drawings before them in regular class exercises?
7. Should pupils make their drawings for a shop exercise before or after they have seen the teacher execute the exercise itself?
8. Where should regular exercises in geometrical drawing come into a course of instrumental drawing?
9. Is it worth while to teach linear perspective to students who know nothing of descriptive geometry?
10. Is it wise to teach pupils to treat one kind of material as though it were a different material? For instance, should clay be used as though it were wood; or wood, as though it were iron?
11. Should we not discourage all attempts to teach joinery by the use of paper, card-board, and thin slips or sheets of wood?
12. Should not the drawing of ornament be followed whenever practicable by the actual construction of the ornament in suitable material?
13. Would it not be well if, in every grammar school, provision were made for instruction in wood-work for all boys over fourteen years of age irrespective of their standing in book studies?
14. Should not similar provision be made for laboratory work on the part of girls in the principles and general processes of the kitchen and the sewing-room?
15. Should not girls be taught all the general drafting that is taught to boys, and enough shop-work to enable them to appreciate detail drawings?

SEEING WITH THE EYES.

The following passage is from an article on the child by Pestalozzi:

"From the beginning of his life, his mother takes him to the open window; he sees the sky and the ground, the garden before the house; the trees, houses, men, and animals; objects near him and others far away; great and small ones; some apart, others close to one another; he sees white, blue, red, and black. But he does not know what distance is, nor size, number, or color.

"Some weeks after, his mother takes him in her arms out-doors, and he finds himself under the tree he can see from the window; dogs, cats, cows, and sheep pass by him. He sees the hen pick up the corn his mother throws to it, the water flowing from the fountain; his mother plucks flowers of all colors, puts them into his hands and gives them to him to smell.

"Some months after his mother takes him further: he sees now close to him the steeple which he had before seen far off. Hardly can he walk, when urged by the double need of playing and knowing, he crosses the threshold in four steps in order to get into the open air, and feel the pleasant warmth of the sun in a little corner behind the house. He tries to grasp everything he sees, picks up little stones, pulls the glowing and perfumed flower from its stalk, puts it into his mouth; he would stop the worm in his path, the butterfly flying about, and the sheep grazing near. Nature unfolds before him and he wishes to enjoy it; every day he gains new ideas, and he appreciates all he sees better than the preceding.

"Mothers! What must you do? Nothing but follow the way that nature and providence indicate. You see what objects God presents to the view of your child as soon as he opens his eyes, and the inevitable effects of his voluntary impressions; bring the child closer to the object that strikes him, and to attract him more let him see what he is most anxious to see; seek what is best within your reach in the garden, house, meadows, or fields—the objects which, by their color, form, movement, brightness, are connected with this favorite object; put them

round his cradle and on the table before him. Give him time to examine the properties of the objects, to observe how they wither and disappear, and how you can restore them by filling anew the vase with flowers, calling the dog who has gone away, and lifting up the broken toy. That is something for his heart and judgment; but the most essential thing, young mothers, is that your child prefers you to all, that his sweetest smiles and lively affections are for you alone, and that you prefer no one to him."

THE PUPILS' BEARING.

By CHARLES S. REDWOOD.

Several years ago, while walking with the teacher of a large school in the upper part of New York, we were met by some lads who politely saluted him by raising their hats. I knew they must be his pupils, and was struck by their politeness, for it is not unusual for the teacher to create such a dislike that a pupil will not tender any recognition save a scowl or a grimace out of school; sometimes it is a yell, a whistle, or "old Jones" and a dodging behind a tree.

By the bearing of these young men I was more struck than by their polite doffing of hats. There was something so free and manly in their walk and movement that I asked for information. He said:

"I give much attention to the carriage of the body, and believe it well worthy of more time than it receives at our school, though I once thought a knowledge of books the greatest of all things. I believe in Delsarte, as you no doubt see. He taught that every muscle, joint, and organ of the body was a means of expression for the soul. I teach the boys to walk, etc., not according to rule, but to express themselves.

"By teaching them how to stand, to walk, to carry themselves, they acquire a dignity that gratifies them and pleases all who see them. They stand up straight, act with freedom, in order to exhibit the best thought and emotions. I give much attention to the voice also. If you should hear them speak you would notice how resonant and musical their voices are.

"I do not say, 'Do this way.' I point out the meaning of the way they do, for instance, in walking, sitting, handling a book, or the like. Thus they learn there is a *why* to all action. I give them a series of gymnastic movements daily, and in these a study is made of the meaning of motion.

"The reaction of the movement on the mind is most valuable. I find many boys, mean and hound-like by nature, who have developed grandly because they have seen their characters were read by others. In other words, they have changed their character to agree with their movements. I don't mean to carry this too far, but it is an aid, and no mistake. I can pick out a boy of mine, if I have had him a year, out of a thousand.

"As for myself I can govern my pupils better since I have learned the carriage of body the superior or commanding person must have.

A boy reads a teacher's mind by the way he carries himself. If he has the behavior of a servant he will not be obeyed. I think the teachers need to study the Delsarte system. It involves something more than bone and muscles; it has to do with psychology most of all.

POLITENESS.

Politeness taught in our primary grade is one of the essentials.

Even the child of five will become so impressed by an "excuse me" from the teacher, who has accidentally caused her to drop her pencil, that in a few months all will be using these little politenesses that make for virtue. Instead of the long-drawn "ma'am" from the child who has failed to hear, teach him "I beg your pardon?" and he will very soon adopt it, because it is something new. A "Thank you," required for all favors in the school-room is good to insist on for a time, and it will be but a short time, for they will soon use it freely.

Go a step further, and tell them of the little boy who said halloo to you as you came to school.

In five minutes you can gather from them all the best forms of salutation, and in the coming days insist that they use them.

And you must keep on insisting for a time. Invent all the stories possible, where this little girl, or a certain little boy, was kind and polite. They are very susceptible; "wax to receive, marble to retain." Give them of your kindest self, your highest self, even though it seem a little beyond them now; they will grow to it, and some of them will never forget.

BECOMING A MASTER WORKMAN.

By SARAH R. WATKINS.

Once, if the schoolmaster was "master of his pupils" little more was required. In the dawn of a better day we now ask, "Is he master of his business," using the latter word in its broadest sense.

Who is the master workman? Not necessarily he who out-does all his fellow laborers. He is the possessor of thorough knowledge, and superior skill. In course of time this possession is likely to make of him a leader or chief, and give him eminent rank or power. Still, if circumstances are so much against him that he must for many years labor in obscurity, the feeling of power will do much to sustain and cheer while rendering the work lighter and more pleasing.

How is this power to be attained? First by faith; belief in one's self, in one's call to the work, in one's possession of latent powers, which, properly developed and trained, will fit one for that work; belief in the grandeur of that calling, in its reasonableness, its harmony with nature; belief in the pupils, in their celestial origin, in their inherent honesty, and in their ability to love, to work, to grow.

Be willing to suffer. Nothing is honestly to be had without paying the price of it, and the more valuable the object desired, the higher the price. Success is not to be had in any calling without suffering. Even those who do not succeed suffer, however unwillingly. It cannot be escaped; therefore, this mastery also must be gained by endurance.

Annoyance, fatigue, anxiety, and grief must be borne with patience and fortitude. There must not be whining or crying. Here pride may be of great assistance. It sometimes proves a valuable staff when there is nothing else at hand. Fortitude will grow if cultivated, and it will pay for the care bestowed upon it. Self-denial is necessary. One must give up all that tends to hinder in the work. He who runs to win strips himself of all superfluous clothing. One cannot carry too heavy a weight.

One must be able to abstract himself from all allurements and enticements, to withdraw from all elements which war against peace of mind.

The aspirant must also learn to concentrate, to give all of his powers at once to the matter in hand and to avoid distraction.

He must study—not only the subjects to be taught, but his pupils, collectively and individually. He must know the temper of each, the predilections, and the prejudices, that he may know how to touch the secret springs of action, and be at no loss for means to influence, foster, and mature the minds and hearts committed to his care.

Such a teacher will never become dogmatic. Teaching will not narrow him. In knowledge of human nature in power of self-control, and surety in general culture, he will become the peer of physician, lawyer, and priest.

He will avoid all danger of rendering eye-service, but having his whole heart in his business, will become "gentle, patient;" and so, "strong and apt to teach."

MUSIC is one means of smoothing the voice, and yet how much rough music one hears in church choirs! How much terrible noise is passed off as music in our public schools.

"Music is the art of making sound beautiful." Every song should be an effort to create the beautiful. If this is the case a delightful effect is left on the hearers. A thing of beauty is a source of joy, be it in whatsoever shape it may.

The use of the vowel sounds by the whole school is a means of improving and beautifying the voice. The teacher can make a chart, if he has none, by putting the vowels (as found in the readers) on it, and then pointing them out for the pupils to repeat. Repeating them is not enough; they must be repeated smoothly, sweetly, delightfully. This should be done daily; the effect will soon be apparent.

In reading it is not uncommon to hear a pupil utter a very pretty sentence in a very rough, rude, and unmusical way. This should be stopped at once. Many more suggestions could be made as to cultivating beautiful voices in the children, but we are now concerned with the teacher. The daily use of the chart of vowel sounds in his room will improve the teacher's voice. Besides he must strive to utter every sound in a musical and pleasing way.

Let the teacher, then, who would be an interesting teacher, inquire whether his countenance, his voice, his manners, his way of speaking, are such as would interest him if another possessed them. Let him remember that an interesting teacher may confer happiness upon a very large number of persons.

THE SCHOOL ROOM.

Under this head will be found practical suggestions dealing with the subjects of instruction in the school:

Feb. 22. DOING AND ETHICS.
Mar. 1. LANGUAGE AND THINGS.
" 8. EARTH AND NUMBER.
" 15. SELF AND PEOPLE.

MODELING IN CLAY AND PUTTY.

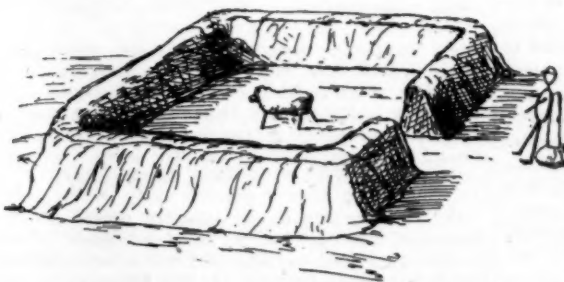
By D. R. AUGSBURG.
I.

Of course we can model spheres, cubes, prisms, etc.; but teachers say that among the most uninteresting objects to the average child are just such things as these.

In appealing to the child, there are certain faculties that are much stronger than others. The reasoning powers are not fully developed, so that it is not well to depend on these, except to a limited extent. But the child sees, imagines, and imitates, in a superlative degree.

Who has not seen a little girl with a shapeless bundle of rags going through all the movements of the mother with a living babe? or the little boy astride a broomstick, enjoying a ride on a real horse? or both together with sand, and bits of crockery and tin, on an old board, fancying themselves in the wholesale grocery business? This only shows how strongly these powers predominate in the child. He sees, he imagines, and then he imitates what he sees and imagines. These, then, are the faculties to which we must appeal to make our class of little ones interested in modeling.

But how shall this appeal be made effective? Surely not by selecting objects that the child cares nothing about. Do not hope to interest a wide-awake, fun-loving, mischievous boy with straight lines, triangles, squares, cubes, cylinders, or any of the thousand other inanimate objects that are nothing to him. Remember how dry and distasteful they were to you, and then have mercy on your little victim. He is all life, energy, and action, and will be delighted if these elements, or their suggestion, can be introduced into the modeling lesson.

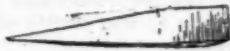


Do not think that it is necessary to make the model lesson so very simple for beginning children. Interest them, and it will make little difference how hard the lesson may be. What do children naturally model while playing in the sandbank? They will make a house and a barn, with all the accessories of a well regulated farm, without once thinking of the difficulty. It is not hard for them as long as they are interested. To be sure, one would hardly know what they were trying to represent, but *they* do, and that is enough. It is the "try" we are after, not the picture; that will come later. All that we should strive to do is to direct this great imaginative and imitative force into right channels. If we can do this, no greater progress can be desired.

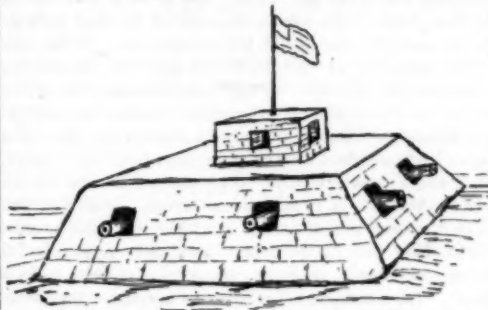
Why cannot the child learn a square, a circle, or a triangle by modeling them in the shape of a square, circular, or triangular field or pen? To add to the interest, sheep may be modeled roughly in clay or putty, and, with slender sticks for legs, be made to look, at least, interesting. No matter if they do not look like sheep. The boy watching the sheep may be made of two lumps of clay or putty, one for the head and one for the body; the neck, arms, and legs are bits of sticks. The post is a stick planted in a lump of clay or putty. The sheep and boy are simply to add some life and interest to the lesson.

The fort in illustration II. may be made cubical to illustrate the cube, cylindrical to illustrate the cylinder, triangular to illustrate the triangle, or any other shape. The port-holes may be made with a sharp, square stick similar to the one in the illustration. The cannon are

round bits of wood with an ink spot for the mouth or muzzle.



The cubical lookout on top of the fort should be made separately, then put in place. The cracks between the



courses of stone may be marked with a sharp stick or wire. The flag-staff is a slender stick with a bit of paper attached.

(In a later paper other designs for children's modeling be will described and illustrated.)

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OBSERVATION LESSONS, WITH SIMPLE EXPERIMENTS.

By JOHN F. WOODHULL, Professor of Natural Science in the New York College for the Training of Teachers.

VI.—LIMESTONES.

When we obtained a gas from chalk the children called it "chalk-gas," to indicate its origin. In like manner they suspected that limestones had been so named, because lime was obtained from them, and they inquired whether chalk, from which we obtained lime in experiment 1, was a limestone. They concluded that if this be so an artificial limestone must have been made in experiment 12; also that cement is an artificial limestone mixed with clay, while mortar is an artificial limestone mixed with sand, or an artificial sandstone cemented together by an artificial limestone. Apropos of this train of thought the two following experiments were called for:

Experiment 13.—We roasted a piece of plaster taken from an old wall, as we did the chalk in experiment 1. When it had become cold we put it in a saucer and added a little water. It swelled up, grew hot and fell to pieces as quicklime does. More water was added and stirred vigorously. The sand settled to the bottom immediately, and the lime remained suspended in the water, which was poured into another tumbler, thus separating the sand from the lime of that artificial sand-limestone. The lime slowly settled upon the bottom of the second tumbler, and the water was made clear by straining as in experiment 2. This proved to be good limewater, since it turned milky when we passed the gas from our lungs into it.

Experiment 14.—We also treated a piece of the same plaster with some acid in the manner described in experiment 5. The bottle was filled with gas that proved to be "chalk-gas" when lime water was added. The chalk was entirely dissolved, leaving the sand in the bottom of the dish.

Similar experiments were performed with like results upon marble, bits of coral, and various kinds of shells. These were all shown to be composed of lime and "chalk-gas." In the same manner blackboard crayon, and carpenter's chalk were tested, but they yielded neither lime nor "chalk-gas."

The varieties of limestones, how they differ, and how they might have been formed, furnish us interesting themes for study and speculation.

Thus we have gone around a circle—chalk, lime, limewater, "chalk-gas," (commonly called carbonic acid) hard-water, limestones.

The children have acquired a great deal of valuable information, and this they have sought eagerly, it has certainly not been forced upon them. But the main purpose of this series of lessons has not been the acquiring of information—the children are welcome to forget the facts that they have learned if they find it possible to do so; they shall receive no examination upon them—our great aim has been to train the children to connect facts in logical order, to "think straight." Incident-

ally the spirit of investigation has been cultivated, and the power of acquiring new facts greatly increased.

The "Young Folk's Cyclopedia of Common Things," published by Messrs. Henry Holt and Co., and sold for \$2.50, should be in every school-room, and the children should be taught to use it as a source of information.

The next series of observation lessons will begin with sulphur.

LESSONS IN MORAL TRAINING.

By EMMA L. BAILLOU, Jersey City, N. J.

FAITHFULNESS TO DUTY.

Teacher.—"I'm tired of this old yard, Jimmie; let's go down to the brook and sail our boats," said Frank Bendix to his brother.

"And leave the house without any one to take care of it," said Jimmie. "I won't do anything of the kind."

Now Frank was older than his brother Jimmie, by two years, and might have been expected to be more trustworthy, but Frank liked to do as he wanted, while Jimmie would never betray a trust.

The two boys were alone, their mother having left them in charge of the house.

She was gone a long time, and the boys grew tired of the yard after a while. I suppose, though, that Jimmie was just as tired of it as Frank was, and would have enjoyed a trip to the brook just as much. The difference was in the boys.

"Mamma didn't say we must stay right here," said Frank, "and I don't intend to. Won't you come too?"

Jimmie didn't say a word, he just shook his head, and went on spinning his top. He had learned that it was of little use to talk to Frank, for he would do as he chose anyway; while he, himself, was fully determined not to be coaxed away from his duty.

Frank gave up trying to get his brother to go with him, when he saw that look in his face, and ran off to the brook without him.

He was soon having a fine time with his boat. To be sure, his conscience told him that he had done wrong to leave the yard, and that it was selfish to leave Jimmie as he had. But he wouldn't listen to it; because, as I said, he liked to do as he wanted, whether it was right or not.

Jimmie stayed alone for an hour before his mother returned. It was a very lonely hour, and nothing whatever happened to the house, during the time. But it made a great difference to the boys, for one had done right and the other wrong. Which of these boys did right?

Mary.—Jimmie did.

Teacher.—What do you say of Frank's action?

Nellie.—It was wrong.

Teacher.—Why was it wrong?

John.—He disobeyed his mother.

Teacher.—Their mother didn't tell them not to leave the yard. She left them without saying anything about it. Why do you suppose she did that?

Harry.—Because she trusted them.

Teacher.—Yes, I think that was the reason. If she hadn't trusted them she wouldn't have thought it safe to go away and leave them alone. She thought they would do right without being told. Which boy was worthy of her trust?

Nellie.—Jimmie was.

Teacher.—Yes, and Frank was not.

John said that Frank was disobedient, and it was mean disobedience, for he knew his mother wished him to stay near the house, even if she didn't say so. Do you think it was just as wrong in him to leave as if she had told him to stay?

Nellie.—I don't know.

John.—I don't think it was. Perhaps he wouldn't have gone if his mother had told him not to go.

Teacher.—I think it was worse. He was not only disobedient, for he knew his mother wished him to remain, but he betrayed her trust in him. Is it the duty of all boys and girls to be faithful to every one who trusts them?

Nellie.—Yes, ma'am. I am sure it is.

Teacher.—Suppose that I wish to leave you alone for a short time, and I tell you that I wish you to do just as well as if I were in the room, and ask a monitor to tell me if you do, what should you do while I am away?

Fannie.—We should do as you tell us.

Teacher.—Yes, you would disobey if you did not.

But suppose I should say, "Children, I wish to leave you alone for a while, and hope you will do right without anyone to watch you. What ought you to do then?"

Harry.—We ought to try hard to do right.

Teacher.—But I might never know whether you did right or not; would that be an excuse for your doing wrong?

John.—No, ma'am; it wouldn't.

Teacher.—Suppose that I have so much confidence in you that I do not say a word, but go away and leave you alone feeling sure that you will do your best. Would it be right or wrong to take advantage of my absence to do something that you would not do if I were here?

Harry.—It would be wrong.

Nellie.—And mean.

Teacher.—I think it would. If any one trusts you try always to be worthy of that trust. Tell me some ways in which you can be faithful, when you are trusted?

Fannie.—When we have the care of our little brothers or sisters we can take good care of them.

Nellie.—When we go to the store we can do our errands faithfully, and take care of the money and the change.

John.—We can do all our work faithfully.

Teacher.—Yes, and to do it faithfully you must do it at the right time, and in the right way, and do so without being watched. I know that is a good deal to expect of boys and girls, but that is what you must do if you are to be faithful. Tell me one of the evil results of being unfaithful.

Nellie.—We will not be trusted if we are not faithful.

Teacher.—No, you will not be trusted; you will always have to be watched.

Let me tell you more about Frank and Jimmie. As they grew older, they did not change much. At school and at home they were still much the same. Frank was not trusted by his teachers because he was not trustworthy, while all had the most perfect confidence in Jimmie. When they began business their habits did not change. Frank lost place after place, because his employers soon found that he was not faithful. He could not be trusted out of sight.

He made a failure of his life, for he grew disheartened and at last felt as if there were no place in the world for him, and he was right. There is no place in the world for the boy who is not faithful.

Jimmie, with no more ability than his brother, grew to be loved and respected by every one. He succeeded in life. Which boy do you wish to grow up to be like?

Harry.—Like Jimmie.

Teacher.—How can you do it?

Harry.—By always being faithful now.

Teacher.—Yes, you must begin now to be faithful to every duty. You must be true to yourself, by doing every duty faithfully, true to your friends by always proving worthy when they trust you, and true to God, by trying to do every duty that he gives you. Then you will grow to be trustworthy men and women. But you must begin now.

MANLINESS.

This means womanliness as well, and so it means a very essential part of character. A boy is none the less a boy because he is manly; neither is a bouncing, laughing, healthy girl less a girl because she is womanly. We want boys and girls, not little prigs of society. We want boy-boys, and girl-girls, who will romp and laugh just as children have always romped and laughed since the first child was born. But the question before us is how can we promote manliness in the school-room?

By encouraging truthfulness. If it is manly in a man to tell the truth, it is even more manly in a child. Suppose a child has been guilty of a wrong action, such as running away with another boy's hat, and throwing it over the fence into a field of oats. The teacher asks the boy, "Did you run away with John's hat?" The boy answers in a plain, straightforward way, "Yes, sir." "What made you do it?" "Just for the fun of the thing," he answers. "And you threw it into the field of oats?" "Yes, sir." "Why did you do that?" "I can't tell. It popped into my head, and I did it." "You see it made William a great deal of trouble. He had to walk through the oats, which made the owner angry. Are you sorry?" The boy replies, "I am sorry. I didn't think." "Do not do it again," the teacher says. "No, sir, I will not." The open-heartedness of the boy wins the teacher's confidence, as well as the good will of all the school. This pupil is exceedingly impulsive, and full of fun, but he seldom gets angry, yet his love of joking gets him into all sorts of difficulty. His redeeming quality is honesty and absolute truthfulness. He never prevaricates the least. If he is asked concerning any transaction he has seen, even if it implicates his schoolmates, he always tells exactly what he saw and heard, without fear or shame. What most

scholars would hide, from a feeling of false honor, he speaks right out. But the singular feature in his character is that his absolute truthfulness never gets him into trouble, because he tells exactly what he saw and heard,—no more and no less.

Manliness is encouraged by work for others. It always makes one feel better to help somebody. A boy coming to school met an old lady carrying a heavy bundle. She was weak and tired. He went a mile out of his way, until he put her in the care of another person, who promised to see her to her destination. When this scholar appeared at the school and gave his reasons for tardiness, his teacher highly commended his action before the whole school. The class work went a great deal better on account of this incident that day. If a friend lends a friend a sum of money, both feel better, but if the borrower returns it promptly, the confidence between the two is much strengthened. Teachers who make it appear that they are working for their pupils, because they love to work for them, have a wonderful power over them. It is the same in a church as in a school. Let a congregation get the impression that their pastor is working for himself and not for them, and his usefulness is at an end. The expression, "He is feathering his own nest," is wonderfully expressive. Politicians are accused of doing this sort of business, and so the epithet "professional politician" has become synonymous with selfishness, greed, and almost rascality.

The great power of the kindergarten lies in its helpfulness. The little children are encouraged to do things for others—to work to help others—to make gifts. This is a grand motive to get into the nature of a child early in life, and it directly promotes manliness. It is comparatively easy to get children to help. They love to do things they see older people do; they feel, "I am of some consequence in this world." The little girl wants to wash, make bread and cake, mend dresses, sweep the room, etc. The little boy wants to dig, drive nails, paint, shovel, etc. He is eager to be doing and helping.

When he has done his work, an encouraging word from his elders is a wonderful help, as it promotes a self respect which is at the foundation of manliness. The old monitorial system was a help to manliness when it was properly applied, although as Lancaster used it, it was made rather a burden than otherwise. It is not a bad plan to permit older children to help others, but this must be used with some caution. Pupils can help the teacher in doing things that need to be done, in and around the school-house. There was once a bad school in the hands of a good teacher. He was puzzled to know what to do to win the confidence of the pupils, and work a reformation. Very soon he hit upon this plan: The school-room was very dirty, and the officers of the district had no money to pay for keeping it clean.

One day he called attention to the condition of the room, and asked how many of his pupils would help him clean it next Saturday. Every hand was raised. The result was that the old benches and floor were made as clean as a new broom. The surroundings of the school-house were much improved, the curtains at the windows repaired, chairs fixed up, and the whole appearance changed. The county superintendent happened to visit the school that week, and was astonished at the change. Here two forces were called into exercise—*helpfulness* and *self-pride*. Children like to appear equal to others. A new hat on the head of one boy makes twenty boys beg for new hats. Girls are especially sensitive in this direction. Within reasonable limits self-pride is essential to manliness. It is a good sign to hear a boy say, "I'm too much of a man to do that thing." It was in the same spirit that an old saint, when tempted to sin, said, "*Is thy servant a dog!*"

Self-respect is essential to manliness. This spirit keeps many men out of the saloon, and many boys out of evil associations. They have too much self-regard. When a boy or a girl learns to choose the best associates, there is great hope. It isn't aristocracy that induces some children to say, "I will not play with that girl." The reason that convicts, when let out of prison, turn out so poorly is that they have lost their self-respect. There are many ways by which this feeling can be created. A few of them are: acknowledging good work in public—reciting before the whole school—rewards that naturally come from successful labor—direct praise, etc. This is an important subject, this creating of self-respect in pupils. Although it comes last in this article, it is first in importance.

THE TEACHERS' PROFESSION is helping many to advance, and others to find out where they stand. It is issued monthly at 30 cents a year. Readers of THE SCHOOL JOURNAL ought to have it.

CURRENT TOPICS.

Under this head will be found a summary of important events, of discovery, of invention; quite a survey of the world—especially the civilized world. See also narrow columns.

YELLOW METAL FROM THE SKY.—It is reported from Granbury, Tex., that a meteor fell recently on the larger of the two Comanche peaks. Its descent was very bright and rapid, fairly illuminating the peak as it fell. It knocked off large stones which went rolling down to the valley, barely missing a house at the foot of the mountain. Fragments of it contain a yellow substance said to be gold. Tell what you know of meteors.

THE PENSION LIST.—During 1889 the pension list increased about 37,000. In 1874 there were only 235,000 pensioners; now there are 500,000, a number greater than the standing armies of the leading European nations. Who draw pensions? Why should the number be on the increase?

LINCOLN'S MEMORY HONORED.—The Union League Club, of Brooklyn, celebrated (February 12) the eighty-first anniversary of the birth of Lincoln. Among the speakers was Stephen A. Douglas, the son of Lincoln's great political opponent. What were some of Mr. Lincoln's qualities?

A TREATY RATIFIED.—The king of Abyssinia has ratified the treaty with Italy. What are Italy's relations to that country? Describe the people, productions, etc., of Abyssinia.

GOVERNMENT TELEGRAPHY.—A plan is before congress of establishing a limited postal telegraph. The idea is to secure a set of leased wires, so that the people may communicate through the post-offices from city to city, or by messages dropped in their mail boxes. What would be the advantages of this arrangement?

FERDINAND IN DANGER.—Those who were accused of plotting against the life of Prince Ferdinand, of Bulgaria, have been expelled from the army. What monarch met a violent death a few years ago? Who is this Ferdinand?

THE BRITISH IN AFRICA.—The British have secured the whole of the fine Yoruba country lying north of the slave coast. It is the source an of important trade that can greatly be developed, and its acquisition opens a trade route to the middle Niger, which, on account of rapids, is not navigable. In what other parts of Africa are there British possessions?

RED RAIN.—The steamer *Queensmore*, which lately arrived in Baltimore from London, encountered a shower of red rain off the banks of Newfoundland. As soon as it brightened up the red rain dried like blood all over the decks and sails, almost dyeing them a light carmine hue. It could be rubbed off like dust. The seamen could not account for it. What do you think was the cause?

MR. VANDERBILT'S OFFER.—English papers call Mr. Vanderbilt impudent because he offered Queen Victoria \$500,000 for a picture by Meissonier now in her possession. The painting was a gift from the late Emperor Napoleon III. What gives a picture its value?

SPAIN AND GREAT BRITAIN.—Spain accuses Great Britain of encroaching upon Spanish territory in making the Gibraltar canal. What do you know about the fortifications at Gibraltar?

ACROSS AFRICA.—Capt. Trivier has just made the shortest trip across Africa. Starting on the west coast above the Congo he struck the river at Stanley Pool, and by means of steamers to Stanley Falls and on Lake Nyassa and the Shire river, he shortened his land march 1,400 miles. His journey took a little less than a year. A man may cross the continent now without losing his touch with civilization. Of what continent is this not yet true?

PACIFIC RAILROADS.—The senate special committee on Pacific railroads reported in favor of giving the Union Pacific fifty years and the Central Pacific seventy-five to pay the debts due the government. When was the first railroad across the continent finished?

THE PARNELL COMMISSION.—The report of the commission declares most of the charges against Parnell to be false or unproved. He favored boycotting, however. Mr. Davitt is accused of encouraging dynamiters. The Land League is called a machine for promoting crimes. What is boycotting? Who own most of the land in Ireland?

CHIFFEWAAS STARVING.—The Indians on the White Earth reservation in northern Minnesota are starving. They did not lay in their usual supply of food, the fishing season is bad, and there is little hunting. What is a reservation? Give some Indian traits.

HOW TO CONDUCT THE RECITATION.

BY CHARLES MCMURRY, PH.D.,

PROFESSOR OF EDUCATIONAL METHODS AND PRACTICE IN THE STATE NORMAL SCHOOL, WINONA, MINN.

Facts and their Connection.—A liberal education embraces a good many branches of study. Besides the subjects of the common school, there are history, classics and higher mathematics, the natural sciences and the fine arts, political economy, literature and philosophy. We are all naturally inclined to think that the more facts we have collected, the more information we have gathered in each of these topics, the better educated and the wiser we shall be. But this is only a half or a quarter true. The strength of an army does not consist in the number of men alone, as Xerxes discovered long ago, but in the *kind of men*, in their strength and courage, in their power of united action. Our knowledge is really serviceable to us only as it is combined into connected compact masses ready for varied use. The purpose of the school, then, is not simply to accumulate knowledge, but also to arrange and connect, to organize and energize the facts learned, to bring them into potent combination; just as a general first enlists recruits, then disciplines them into soldiers and organizes them into an effective army. The facts commonly learned in the schools are indeed the materials out of which our intellectual house is to be built, but we are concerned not only about getting these materials into the structure of the mind, but about the plan and order there is among them, and whether the walls are loose and shaky or firm and solidly built.

Digesting Knowledge.—The stomach and the mind are alike in some points and unlike in others. The food that once enters the stomach is taken up and assimilated by the organs of digestion. Our chief care is to avoid overloading the stomach, and to give it a chance to perform its functions. It is self-acting. The materials which enter the mind pass through a digestive process; and this lasts longer. A cow chews her cud once; but the ideas which have entered our minds may be chewed over and over again, and that with great profit. Ideas do not assimilate so easily as the different food-materials in the body. Ideas have to be put side by side, compared, separated, grouped, and arranged into connected series. Thus they become organized for use. This sorting, arranging, and connecting of ideas is so important that it demands more time and more care than the first labor of acquisition.

Absorption and Reflection.—The process of acquiring and assimilating knowledge involves certain simple conditions which are easily stated. When some new object presents itself to the mind the attention must be first fixed upon it for a while so that there may be time to take it in as a whole and in its parts. The mind then recovers itself from this momentary absorption in the object, and begins to survey it in its surroundings and connections. Absorption and reflection! The mind swings back and forth like a pendulum between these two operations. Herbart, who has closely defined this process, calls it the mental act of breathing. As regularly as the air is drawn into the lungs and

then excluded, so regularly does the mind lose itself in its absorption with an object only to recover itself and reflect upon it.

In this first simple action of the mind are reflected the two fundamental principles which control all growth in knowledge.

Observation.—The first is the inspection of things in themselves and in their details. Absorption with objects! Object lessons! The principle of observation is confirmed in its full scope. The training of the senses to the full capacity of sense of perception is primary and necessary. The contact with nature, the actual experience with things, is the only concrete basis of knowledge.

Survey.—The second principle is the act of reflecting upon the things which enter the mind, the comparison of objects. It brings together things that are alike, e.g., the river basins of North America and the river basins of South America. It throws into contrast things that differ, e.g., the desert of the Sahara and the rich moist valley of the Amazon. By a constant use of reflection and survey we classify our increasing knowledge into larger and smaller groups; causes are linked with their results, and the spirit of investigation is awakened which discovers and traces out those simple laws which underlie the complex phenomena of nature. The linking together of ideas into continuous series, the comparison of objects so as to bring out the salient features of whole classes, and the tracing of causes and results are means of organizing, of binding together, ideas which must be at the disposal of teachers in their recitation work or the higher results of education will not be reached. We may sum up the thoughts involved in this second great principle of learning as *Association of Ideas*.

Apperception.—Going back to the first simple state of the mind in learning, its absorption in a given object, the question arises, How can any new or partially new object be best understood at its first appearance? How can a full and distinct understanding of it be readily gained by the mind? We claim that if the kindred ideas already in the mind are awakened and brought distinctly to the front the new object will be more rapidly and accurately appropriated than by any other means. This is called the principle of *apperception*, i.e., the reception of a new or partially new idea by the assistance of kindred ideas already in the mind. If old friends come out to meet the strangers and throw their arms about them and lead them within, how much more quickly they will be at home! But these old friends who are already in the house, who stand in the background of our thoughts, must be awakened and called to the front, they must stand on tiptoe ready to welcome the new-comer; for if they lie asleep in the penetralia of the home, these strangers will come up and pass by for lack of a welcome. Closely allied to this is the principle of *proceeding from the known to the unknown*, which has caused so much discussion and misunderstanding. Ap-

perception contains what is true in this idea of going from the known to the unknown. As soon as we see something new and desire to understand it, we at once begin to ransack our stock of ideas to see if we can find anything in our previous experience which corresponds to this or is like it. For whatever is like it, or has an analogy to it, or serves the same uses, will explain this new thing, though the two objects be in other points essentially different. We are constantly falling back on our old experiences and classifications for the explanation of new objects that appear to us.

Examples of Apperception.—A boy goes to town and sees a banana for the first time, and asks, "What is that? I never saw anything like that." He thinks he has no class of things to which it belongs, no place to put it. His father answers that it is to eat, like an orange or a pear. Calling up these familiar objects, the whole significance of the new thing is clear to him though it differs from anything he has ever seen.*

From Simple to Complex.—The notion of going from the simple to the complex is illustrated also in the simple process of the mind which we described. First one object, then the survey of it in connection with other things, forming a complex unit. This idea has been confused with the idea of going from a whole to the parts. But there is no real contradiction. There are many objects which we first take in as a whole, and then descend to an analysis of their parts, e.g., a camel, a mountain, a flower. Almost all concrete objects are approached in this way. But there is an entirely different set of ideas which can be best approached gradually, adding part to part and comparing till the whole appears. This is the case with the general classifications in the natural sciences, and in all subjects that admit of a system of classified objects.

Excite Interest.—That the *interest* of children is to be awakened in the subject of study may now be accepted as one of the axioms of teaching. To answer the important question how a healthy and sustained interest is to be awakened in studies would be to solve many of the greatest difficulties in teaching. To interest children, not simply for the hour, but perma-

* We will add one other illustration of apperception. Two men, the one a machinist and one who is not, visit the machinery hall of an exposition. The machinist finds new inventions and novel applications of old principles. He is much interested in examining and understanding these new machines and devices. He passes from one machine to another, noting down new points, and at the end of an hour leaves the hall with a mind enriched. The other man sees the same machines, but does not understand them. He sees their parts, but does not detect the principle of their construction. His previous experience is not sufficient to give him the clue to their explanation. After an hour of uninterested observation, he leaves the hall with a confused notion of shafts, wheels, cogs, bands, etc., but with no greater insight into the principles of machinery. Why has one man learned so much and the other nothing? Because the machinist had previous knowledge and experience which acted as interpreters, while the other man had no old ideas and so acquired nothing new. "To him that hath shall be given."

nently; to select, arrange, and so present ideas that they awaken a steady appetite for more knowledge and create a taste for what is excellent, *this* at least is one aim that we must insist upon in recitation work. Some things already mentioned contribute to this result. Nature and natural objects have a charm for us all, children included. Story, biography, history, and poetry, each in its place and time, awakens mind and heart, and sows seed that will germinate and grow.

Compare.—In school life, also, the more serious work of study requires us to put familiar objects together and to notice how they resemble or differ, and it may excite interest to note the superiority of one or its defect. This gives children a chance to see and compare for themselves, to draw conclusions and form their own opinions. Still more the tracing of causes and their effects, the following out of analogies in botany and zoology, or in the life of great men, may contribute greatly to interest older children.

Arouse Self-activity.—We are already encroaching upon the principle of *self-activity* which we believe, with many other teachers, should be systematically encouraged from the beginning of school life. The child itself should have something to do, some aim set up to be reached, a problem to be solved, a series of objects, places, or words to develop,—not simply something to learn by heart, but something that requires thought, discovery, invention, and arrangement; e.g. first-grade children may be asked to hunt up and form a list of all the words in the lesson containing *th* or *ll* or some other combination.

Develop Will Power.—*The effort to create a progressive and sustained interest in study and the arousing of self-activity are steps preparatory to the growth of will power.* This is one of the root ideas of intellectual as well as of moral training. In connection with self-activity and interest there must be the pursuit of definite and clearly seen aims, i.e. definite and clear to the pupil, if will energy is to be developed.

Of course the adaptability of the materials of study to the child will have much to do with exciting interest and with the exertion of will power in their pursuit. But every step should involve a clearly seen aim, a natural sequence of subjects, so that children can see the objects they are working for at least in outline, and the means of reaching them. For we adopt the principle that there can be no exercise of will power unless the aim and the possibility of reaching it be distinctly seen.

Summary.—Summing up the essential ideas of good recitation work, we say: The training of the senses to close, accurate observation, and the process of comparing and classifying objects and ideas, constitute the fundamental action of the mind in learning. The assimilation of the new materials of knowledge by bringing old, familiar ideas into the closest contact with the new according to the principle of *apperception* is the true interpretation of the popular idea "from known to unknown."

The principle known as association of ideas requires that all our knowledge be united into firmly compacted groups and series, and bound together by the law of cause and effect. Finally, a sustained interest, self-activity, and will energy, steadily cultivated from the earliest years of school life, indicate that it is not simple knowledge or increased information which we

aim at, but increase of intellectual resource, and a permanent, progressive interest in knowledge.

Lesson Unities.—It is evident that in this kind of teaching no single recitation can be viewed apart from the series of lessons to which it belongs. The subject-matter of any study should be first selected so as to be adapted to the age, spirit, and previous knowledge of children, and then it should be arranged into a succession of topics or unities each of which may be treated first separately, and then in its relation to the others. One of these methodical unities may be completed in a single recitation or it may spread over a series of lessons.

Steps in Teaching a Lesson.—On the basis of the psychological principles already treated, the process of teaching a new topic leads through a series of steps. The Herbartian school of pedagogy in Germany has developed a plan of recitation work based upon these steps, and has applied them successfully to the teaching of common-school studies. The two main stages on the road to acquisition of knowledge have been already indicated: 1. As observation and scrutiny of individual things; 2. As the association and comparison of objects or ideas with a view to arrangement into classes or for the purpose of generalizing and formulating results.

First Stage: Presentation.—The first stage may be broken into two smaller half-day journeys. Before setting out on a journey it is well to survey the road and glance at a guide-book. Before beginning a new subject it is well to recall familiar ideas bearing upon it, to refresh our minds. This is a *preparatory* study, a making ready for the lesson. The second part is the actual presentation of the new facts, the familiarizing the mind with the new subject.

The subject-matter is now at hand, and the first stage of teaching the lesson is complete. But this newly acquired information has not yet settled to its proper place in the mind; it is not properly associated with previous knowledge.

Second Stage: Elaboration.—This elaboration of newly presented ideas and facts leads us through a series of three additional steps, which thus complete the process of acquisition: 1. The new object is compared with similar things already in the mind. In this way it finds its fitting companionship. 2. Every new object presented to the mind and then compared with others gives rise to new conclusions. The clear statement of this general result or truth focuses the main idea of the lesson. 3. This general truth may now be exemplified in new cases and applied to new circumstances.

Briefly stated the steps are as follows: 1. Preparation; 2. Presentation; 3. Association and comparison; 4. Generalization; 5. Practical application.

It is to be remembered that a subject to be treated in this manner must contain a unity of thought; that it must centre in an object which is typical of a class, so as to serve as a basis of comparison and generalization.

Analogy of the Farmer.—These steps may be fairly illustrated in their general outlines by an analogy taken from the work of a farmer. 1. The soil is ploughed, harrowed, and made ready for the seed. 2. The grain is sowed upon the ready soil and raked in. 3. The growing grain is cultivated and the weeds destroyed. 4. The harvest is brought in. 5. The grain is used for practical purposes of food.

The analogy is so complete that it scarcely calls

for a commentary. The preparation is the preparing of the soil of the mind for the seed-corn of instruction. The presentation is sowing the seed upon this prepared soil of the mind. The third stage is the cultivation of the growing crop, the working over of the knowledge just acquired by means of comparison. The fourth step is the harvest time, the drawing out of the general truth or law involved in the lesson. Finally, the particular uses to which the harvest grain is put, the application of acquired knowledge to the practical uses of life.

No Royal Road in Teaching.—The five steps just outlined are based, as we believe, on general principles which make them applicable to almost every subject of study. But the manner of applying them to different studies varies greatly. The ability to apply them successfully to geography would not qualify for equal success in arithmetic or botany. The teacher must first be a proficient in the study which he would desire to teach in this way. Both the concrete facts and the general truths of the subject should be familiar and logically arranged in his mind. To put it in a mild form, the teacher must have a thorough knowledge of his subject, and must have this knowledge well digested for teaching purposes. *For teaching purposes!* That is, that we have a knowledge of those psychological principles which we first outlined as a basis of the five steps, viz., observation of concrete things, apperception, comparison and association, generalization and the awakening of interest, self-activity, and will power by these means. Now it is evident that no plan based on these principles will furnish a *royal road* to success in teaching. Success along this line depends upon industry, adaptability, and continuous practice. It will be an uphill road for some time, and it is only gradually that one will acquire that mastery of the subject and that tact in the manipulation of a somewhat complex machinery that come only through toil and pains.

Dull Machine Work.—It does not require a prophet to see that the five steps in careless hands will degenerate into a dry mechanical routine. It might be even worse than text-book lore, for a good text-book is always better than a poor teacher. It is not intended that this plan and these principles shall make a slave of the teacher, but that by a hard-earned mastery of their details, and by a successful application of them to the concrete materials of study, he gradually works his way out into the clear daylight of conscious power. In this way the teacher becomes a skilled architect, with clear ideas of the strength and resistance of materials.

Examples of the Formal Steps.—Three simple illustrations of this succession of steps in the treatment of a subject will now be given. Some criticisms which have been raised against this plan will then be discussed. Finally, the translation of Professor Rein's introduction to the formal steps will be appended.

(1) *Statement of the Aim.*

We will examine and study the *oak trees* found in our forests.

1. (Preparation.) Let the class recall what they have seen of oak trees in the woods, size of trees, acorns. Do they remember the shape and size of the leaves? What is the appearance of the wood and what is it used for?

(The purpose of the teacher here is not to

present any new facts to the class, but simply to find out what they remember from previous observation and to excite interest.)

2. (Presentation of facts.) The best plan is to visit the woods or an oak grove, notice carefully the trunk and bark, branches and leaves, acorns (food of squirrels.) On returning to school, have an accurate description of the oak tree from the class, according to definite points (e.g. trunk and bark, branches, leaves, and acorns.) Then follows a discussion of oak wood for chairs, desks, doors and windows, beams, posts and other building purposes, bridges, walks, etc. (The teacher adds such facts as the children cannot furnish.)

3. (Comparison.) Name the different kinds of oak—white oak, red oak, burr oak. Notice the differences in leaves and acorns, size of trees, wood and uses.

4. (Classification, generalization.) Definition of the oak family. The oak is a native hard-wood tree. It has acorns, and simple leaves of nearly uniform shape. The wood is tough and strong, of varying colors, but always useful for furniture, building or other purposes. (After the previous observation and discussion, the pupils will be able to give a definition similar to this, assisted by a few questions from the teacher.)

5. (Application.) Children should be trained to recognize the different kinds of oak trees about home, and to distinguish them from other hard-wood trees. They may also notice the oak panels and furniture, and be able to tell oak finishing in public and private houses.

Note.—If there is time enough for a separate study of two or more varieties of oak, and the trees are close by so as to be seen, it is well to treat each variety according to the first and second steps, and in the third compare as above.

(2) The Cotton-gin.

(Aim.) We will find out how a machine was invented to remove the seed from cotton.

1. (Preparation.) Question the class on the cotton-plant, raising and picking cotton, and the uses of cotton.

2. (Presentation.) Tell or read the story of Whitney and the invention of the cotton-gin. Notice the effects of this invention on the production of cotton in the South, and upon the growth of the South.

3. (Comparison.) Name other important inventions and their effects,—sewing-machine, printing-press, steam-engine, reaper, steamboat, telegraph, etc. Which of these had the most important results?

4. (Generalization or abstraction.) Call upon the children to state the general purpose of all these inventions, to save labor, to make a better use of the forces of nature.

5. (Application.) Do any hardships result to anybody in consequence of these useful inventions? (e.g., men thrown out of employment by use of machinery.)

(3) Nouns.

Suppose that a class has had oral and written language work, but no technical grammar.

(Aim.) In talking and writing you have been accustomed to use words. We propose to talk now about a class of words called *nouns*.

1. (Preparation.) Have you heard the word *noun* before? Give some words that you think are nouns. Try to point out the nouns in this sentence: "The ship sailed over the ocean."

(It may be that these questions cannot be answered by the children for lack of knowledge. But even if they show no knowledge of the subject, these questions may excite curiosity and awaken interest, and they require very little time.)

2. (Presentation.) I will give you some words that are called nouns. Stove, cherry, hat, court-house, carpet, picture, whale, shoe, barn, mountain. Have you seen all these things?

3. (Comparison.) Notice these words and see if you can tell what they all refer to. We will take two or three words that are not nouns and see what they refer to. *Up, and, quickly*. What is the difference between these words and the nouns? Look at the nouns again and tell what they refer to.

4. (Definition.) Looking at our list of nouns again you may tell what a noun is. So far as these words are concerned every noun is the name of what? (The conclusion that the children may reach by a little good questioning is that all these nouns are the names of objects. The treatment of proper nouns and abstract nouns may be according to a similar method in the following lessons, and then the complete definition of a noun can be obtained.)

5. (Application.) Each child may make a list of nouns that we have not had.

Let easy sentences be given in which they may point out the nouns.

CRITICISMS.

Anticipating Results.—One objection raised to the clear statement of the aim of a lesson at the start was that in such a statement we tell the children what we wish them to find out for themselves, that we anticipate results which they should learn to discover and state. This criticism is just if true. But it is a misconception of the proposed manner of stating the aim. It is a fundamental principle that the statement of the aim should not *anticipate* results. It should be definite and clear, but it should state a problem for solution. It should point in the direction of the result without giving the clue. If the teacher proposes to develop and illustrate the law of multiple proportions in physics, he would not state the *law* as the aim, but put it in some such form as this: We have noticed that certain chemical elements unite to form compounds; we will next investigate the question as to whether they unite according to any definite law. Experiment and investigation will reveal what the law is.

Pupil's Work.—Another serious criticism of this plan of class-work is that it outlines well the work of the *teacher*, but what does the *pupil* have to do?

We will attempt to illustrate as follows:

(Preparation.) The pupil has to prepare his lesson before coming to the class. This is done in all good schools. Suppose that the subject treated is the early discovery and exploration of the Ohio Valley previous to the French and Indian War. The teacher proposes this as the next topic for history study. If this subject is treated according to the recitation plan, the first thing is to determine how much or how little the children know of the proposed subject. Who were the first explorers of the Ohio Valley? Whence came they? Who owned the land? The topics naturally brought out by this brief questioning are, The French, the English, the Indians. Having determined thus what the children know, and having excited their curiosity, the next work

for the teacher (at this stage) is to indicate what pages of the text-book and, if desirable, what pages in other histories bear directly upon this topic. If the references are more than one person will have time to look up, certain persons or sections of the class may be asked to be prepared on special points or books of reference. The work of preparing the lesson by studying up these references is similar to that of lessons as usually assigned.

(Presentation.) Now the pupil is required not only to present the topic which he has studied, but to pay close heed to the additional facts and topics presented by other pupils, and to see if he can arrange the facts presented by the whole class into systematic form. The proof of this ability is the oral statement of the main points. It is plain that the pupil must have his wits about him, pay close attention to all that is said, and then exercise his own powers of arrangement and expression.

With the completion of this part of the work we should be done with the first two steps, namely, the *preparation* and the *presentation* of the facts.

The third step consists of a *comparison* of the facts of this lesson with similar facts or topics in other lessons previously learned. The self-activity of pupils is fully awakened by asking them to reproduce similar cases in American history where the English and French, the English and Dutch, the English and Spanish have both explored and laid claim to new territory, causing conflicting claims: e.g. the claim of the English and French to Nova Scotia; the claim of English and Dutch to New York; the claim of English and Spanish to Georgia and Carolina; etc.

The clear statement of each of these cases and their comparison will bring out a common conclusion from the children regarding them all (fourth step). What did all these claims rest upon, and how were they enforced? The pupil's own intelligence and moral judgment are abundantly sufficient to answer these questions. The conclusion thus reached will probably point to the manner in which the claim to the Ohio Valley was settled (fifth step.)

After a topic has been thus fully treated before and during the recitation, it will often prove an excellent exercise to call for a written composition giving a full discussion of this topic. The pupil is left free to treat the main topics in his own way. The outline of the subject has been already fully developed in the class, but the pupil is free to discuss the points in his own language and to form his own conclusions.

TRANSLATION FROM PROF. W. REIN'S "DAS ERSTE SCHULJAHR."

The Formal Steps in their Outlines.—Proceeding now to the act of instruction itself, we notice first of all that the subject-matter of every study like Arithmetic or Geography is to be divided up into a large number of smaller parts, units of instruction, each of which will occupy from one to four, or even more, recitations. These divisions of a term's work in History or Geography are what Ziller calls *methodical unities*, and each one of them is to be carried through the successive steps of a systematic recitation plan, namely, the formal steps.

For if the single topics which go to make up the great variety of school studies are to be

clearly understood and thoroughly assimilated, each must be worked over by itself. For this purpose sufficient time must be given so that the details of each object can be absorbed, and this absorption with the details must be succeeded by a period of recollection, a brief survey of the situation, a glance backwards and forwards, so as to fix the relations of this object to others. Suppose that the instruction in a class begins with one of these methodical unities. The first thing to do is to make plain to the pupils the general *object* or *aim* of the lesson. In a primary class, for instance, the aim may be so expressed: "To-day we will hear the story of a little girl that lost both father and mother." For a more advanced class as follows: "We are acquainted with the earth as a great ball hanging in space. We will next see whether this ball is at rest or in motion."

Reasons for Stating the Aim at First.—There are several important reasons in favor of the plain statement of the purpose of a recitation at the beginning. 1. It pushes aside and out of view those irrelevant thoughts which chance to occupy the mind before the recitation, and it accordingly makes room for those ideas which are about to be developed. 2. It transplants the children into the new circle of ideas which are to demand their attention, and it encourages the rise in the child's mind of those older and kindred thoughts which will be most welcome supports to the new ideas about to be presented. 3. It excites expectation, and this is the most favorable disposition of mind for the beginning instruction. 4. It gives the child a strong incentive to an exercise of the will, and impels it to voluntary co-operation in solving the difficulties of the proposed lesson.

The last point is of fundamental importance, and worthy of a special consideration. The pupil should know beforehand what is coming if he is to bring all his powers to bear on the work of learning, and it is easier to call out all his effort if he knows beforehand just what is to be gained. To conduct a child along an unknown road toward an unknown object, by means of questions and hints, the object of which he does not see, to lead him on imperceptibly to an unknown goal, has the disadvantage that it develops neither a spontaneous mental activity nor a clear insight into the subject.

Having reached the end of such a line of thought, the pupil looks about himself bewildered. He cannot survey the road that he has just gone over. He does not comprehend what has happened to him. He stands at the goal, but does not see the relation in which the result stands to the labor performed. He does not rise to that satisfactory mental activity and favorable disposition of mind which are stimulated by the pursuit of a clearly set purpose. No aim, no will! Now since an instruction that aims at moral character finds its highest purpose in the development of will power, it follows that a lesson should develop the will just as much as the understanding. But to develop will-power, instruction must pursue plainly set aims, and to reach them the pupil must be called upon to throw all his mental powers into the effort.

The general purpose of a lesson having been made plain, the real work of teaching then begins, and in every methodical unity this work runs through a succession of five steps.

First Step.—The first step in this process consists in a preparation of the ground for the re-

ception of the new lesson. This is done by freshening up and calling clearly to the mind such older ideas as bear upon the new, such as by their similarity explain and assist the understanding of the new. It is only when a troop of old familiar ideas come forth to meet the strangers that they are received easily into the mind. It is in this way alone that they can make a lasting impression upon the thoughts and feelings. If these forces which lie asleep in the background of one's thoughts are not called into activity, one will remain dull and indifferent to the recitation, and the instruction reminds us of a learned discourse which shoots over the heads of the listeners. Instead of interested attention and participation, it produces only weariness of mind.

This result will always follow when that which is said awakens no chords of sympathy in the minds of the hearers. If nothing springs forth from within to greet that coming from without, the lesson will be meaningless and the pupil unresponsive. Things new and strange can only be appropriated by means of a wealth of old ideas, and the plan of recitation must see to the preparation of these old materials during the first step.

Second Step.—The second step begins with the presentation of the new lesson, which will vary in manner according to the age of pupils and the nature of the study. A story would be related to a primary class, or developed according to the conversational method. A reading lesson for older pupils would be read. A geography topic would be presented by the teacher while talking and drawing, and a subject in physics while experimenting and speaking. If the preparation has been of the right kind the lesson will be appropriated with ease and certainty, and the teacher will not be compelled to talk and ask and explain all round the subject. Whenever this is necessary the preparation, the first step, must be regarded as a failure. What has been learned is not only to be momentarily understood, but permanently appropriated. It is necessary to close up this step with repetition and drill, and these must be continued under varying forms till the lesson has been firmly fixed. In this manner the first great act in the process of teaching and learning has been completed, namely, the presentation and reception of the subject-matter, and it consists, as we have seen, of two steps, preparation of the ground and presentation of the lesson. The second act within the limits of a methodical unity is the process of building up and bringing into distinct form the general or abstract ideas which are to be drawn from the concrete materials already collected, and this second act is brought to a conclusion in the three following steps.

Third Step.—In the third step we are to bring together in the mind the newly won ideas, to compare them among themselves and with older ideas, and when necessary with additional new ones still to be presented; in short, to compare and to combine the new and the old. Such a comparison and union of ideas is necessary for two reasons: (1) in order that connection and harmony be established in one's range of ideas, and (2) that what is general and essential in the midst of special individual things may be extracted from them. Nowhere should heterogeneous heaps of knowledge, like piles of gravel, be brought together. Always and everywhere there should be an effort towards well associated and systematized knowledge. "Our whole personality rests in the end upon the unity of consciousness, and this is disturbed and injured when the mind is driven through a confused conglomerate of knowledge in which unconnected ideas are piled up together."

But every concrete individual thing which is treated as a *methodical unity* contains or em-

bodies a general truth, an abstract notion, which may be separated from the concrete thing in which it is embodied. But it can only be brought to light by bringing this object into comparison with other well-known concrete objects which contain the same essential idea or truth, by bringing together in the mind things similar but not identical. That which is common and essential to all is strengthened by repetition, while accidental features and differences drop easily into the background. The common truth which all the objects embody springs forth as a new idea of higher potency, as a general notion, as a rule or law.

Fourth Step.—But the abstract idea is still bound up with the concrete thing; a complete separation of this abstract or general notion from its clothing in particulars has not yet taken place: and this is the purpose of the fourth step. By means of a few well-directed questions we call out into pure and simple relief the general truth or rule, freed from its particular applications. We reduce this idea to definite language expression, and finally bring it into systematic connection with our previously acquired knowledge. It only remains to impress the abstract ideas thus acquired upon the mind by repetition, so as to convert them into a real mental possession. With this the process of abstraction is complete, but teaching cannot afford to end the matter here. A fifth step is needed to convert the knowledge acquired into use.

Fifth Step.—Knowledge and ability to know have of themselves no value either for the individual or for society. Knowledge must first step into the service of life. One must know how to apply his knowledge. Knowledge and power must be changed into use; they must be transformed into conscious ability. But will not this take care of itself? Not at all. Hundreds of children have learned how to estimate the surface of a triangle, and many of them can give the proof of the rule with ease and precision. But put the question to one of them: How many acres does a triangular garden contain? He will stand helpless, unconscious of the fact that he possesses in his own mind all the necessary elements for the solution of the problem. How is this explained? He has not learned to employ his knowledge. It is a dead possession. And are there not plenty of such cases? The conclusion is that even the application, the use of knowledge, has to be learned. "Here also it is only practice that makes the master. But drill which aims only at mechanical habit is not sufficient. Even during school life that which is learned should be applied as often and in as many cases as the narrow limits of the child's life permits."

Since the value of knowledge culminates in use, instruction should cultivate its use so far as possible in a closing step called *application*. For this purpose the child should be held to a diligent use of its stock of ideas as rapidly as they are acquired, to go from the particular to the general, and back again from the general to the particular, to traverse his circle of ideas from a given standpoint in all directions, and to make use of the results reached for the solution of moral, theoretical, and practical questions. In this manner a child's acquired ideas may be so developed, so welded together in firm, systematic, comprehensive association, that all his knowledge becomes a reliable, personal possession. It is clear and systematic as well as practical.

And this ends the development of general notions within the limits of the formal steps of instruction.

To recapitulate: In the work of instruction each methodical unity should be carried through the following steps:

1. It should introduce the new lesson by means of a preparatory discussion.
2. Present the new lesson.
3. Compare the new in its parts and with older ideas and their combination.
4. Draw out the general results of this comparison, and arrange them in systematic form.
5. Convert the knowledge acquired into use.

SUPPLEMENTARY.

The teacher will find material here to supplement the usual class work, in geography, history, etc. If rightly used it will greatly increase the general intelligence of the pupils, and add to the interest of the school-room.

THINGS TO TELL PUPILS.

Tell them about the little Bahrain island group that hugs the coast of Arabia in the Persian gulf. The largest of the islands is twenty-seven miles long and ten wide, and is mostly a dead level of sandy desert, relieved by patches of cultivation, while the others are mere rocks. The chief industry of the group is the pearl fishery; it employs about 2,000 men for six months in the year. The divers, who are mostly negro slaves from Africa, live in bamboo huts along the coast. A rope is looped around their chests, a stone is attached to drag them to the bottom, the orifices of their ears are oiled, a horn is fastened over their noses to keep out the water, and they are ready for the descent. The pearls are more lasting and harder even than those of Ceylon. Each of the 400 boats engaged in the business pays a good round tax to wealthy old Sheikh Esau, the ruler of this little domain; for the Bahrain islands form one of the independent governments of the world.

Tell them about the proposed railway route from London to India, via Kurrachee. The channel tunnel is, of course, to form a part of the scheme, though not an absolutely essential part of it, since the start could be made from Calais or Boulogne. The railway would proceed direct to Gibraltar, using the existing lines as far as possible, and here would be a vast broad-beamed boat capable of taking on-board the entire train, and delivering it on the rails at Tanger. There the line would strike eastward, keeping along the north coast of Africa, passing through Egypt, and proceeding by the Persian gulf to Kurrachee, where it would join the Indian railway system.

Tell them about the vikings, the direct ancestors of part of the English-speaking people. Paul du Chailly, the celebrated traveler, insists that "the people who were then spread over a great part of the present Russia, who over-ran Germania, who knew the art of writing, who led their conquering hosts to Spain, into the Mediterranean, to Italy, Sicily, Greece, the Black sea, Palestine, Africa, and even crossed the broad Atlantic to America, who were undisputed masters of the sea for more than twelve centuries, were not barbarians." He says that no early Gallic or British civilization surpasses that of the North.

Tell them that Mr. Stanley found, during his recent African trip, that there is a southern African lake, which he named Lake Albert Edward. It is 900 feet higher than the northern lake and connected with it by the Sempliki river. Mr. Stanley skirted the snowy mountain range referred to in his letters, and found that it sends down fifty streams to feed the Sempliki. These explorations probably establish the true relations which exist among the great lakes of Central Africa. They fill up a large blank on our maps, and go far toward completing the physical geography of the continent.

Tell the pupils about Signor Crispi's career. He was born at Ribera in Sicily, October, 1819. In 1848 he took part in the insurrection against King Ferdinand. When that was suppressed many of the leaders were imprisoned in the dungeons of Ischia. Some, with Crispi, made their escape to France. In 1859 the petty despotic governments of central Italy were overthrown, and in 1860 the expedition of Garibaldi from Genoa, which was accompanied by Crispi, speedily accomplished the downfall of the Bourbon dynasty. After the annexation of Sicily to Italy, he was the right hand man of Garibaldi in the Italian parliament. As prime minister his aim has been to form a stable alliance with Germany and Austria, both for the safety of central Europe in general (which concerns Italy on account of her geographical position), and with a view, possibly, to Italian interests in the Levant and the Mediterranean.

Tell them about the discovery of buried cities in Arizona. The Hemenway expedition, which has been at work for several months, has excavated a city three miles long and two miles wide. This is called Los Muertos, the city of the dead. Others that have been partially excavated are El Pueblo de los Hornos, the city of ovens; El Ciudad de los Pueblitos and El Pueblo de los Pedros. But these are only a part of the chain of

cities that once covered the desert. There are nineteen buried cities in the Salt river valley alone, and Los Muertos, which had a population of ten thousand, is one of the smallest. The people who lived in these were not Aztecs, as has been supposed. They were of the Toltec race that preceded the Aztecs, and had upon this continent a civilization older than the pyramids. This is proved by the human remains and relics found. They were probably of Asiatic origin, but not Mongoloid. The age of the Toltec ruins is reckoned in thousands of years. The climate and character of the soil were, apparently, the same as now, and a vast system of irrigation was required to make the land productive.

Tell the pupils about Sir Daniel Gooch, an English railroad king, who died recently, aged seventy-three years. He learned to be a locomotive maker in the shop of Robert Stephenson, son of the inventor of the locomotive. When twenty-one years of age he was made superintendent of locomotives for the Great Western railway company. Several locomotives he made forty-five years ago are still in use. He collected that mass of knowledge about rails, the limits of speed, and many other points which have reduced the danger of railroad travel to a minimum. He was interested in the Great Eastern steamship and the Atlantic cable.

Tell them about the new use for Niagara Falls. It is proposed by means of the falls to generate enough electricity to be transmitted to Buffalo, Lockport, Rochester, Hamilton, and Toronto, there to be used as a motive power for working stationary engines at a greatly reduced cost per horse power. The project is to drive a tunnel under the falls at a point about 165 feet below the upper level of the river, and at its end excavate a large chamber for placing water wheels and dynamos, the supply of water to be from pipes leading into the tunnel, with a fall of about 160 feet.

THE OLD OCEAN.

The sea occupies three-fifths of the surface of the earth. At the depth of about 3,500 feet waves are not felt. The temperature there is the same, varying only a trifle from the ice of the pole to the burning sun of the equator. A mile down, the water has a pressure of over a ton to the square inch. If a box six feet deep was filled with sea-water and allowed to evaporate under the sun, there would be two inches of salt on the bottom. Taking the average depth of the ocean to be three miles there would be a layer of pure salt, two hundred and thirty feet thick on the bed of the Atlantic. The water is colder at the bottom than at the surface. In the many bays on the coast of Norway the water often freezes at the bottom before it does above. Waves are very deceptive. To look at them in a storm one would think the water traveled. The water stays in the same place, but the motion goes on. Sometimes in storms these waves are forty feet high, and travel fifty miles an hour—more than twice as fast as the swiftest steamer. The distance from valley to valley is generally fifteen times the height, hence a wave five feet high extends over seventy five feet of water. The force of the sea dashing on Bell Rock is said to be seventeen tons for each square yard.

Evaporation is a wonderful power in drawing the water from the sea. Every year a layer of the entire sea, fourteen feet thick, is taken up into the clouds. The winds bear their burden in to the land, and the water comes down in rain upon the fields, to flow back at last through rivers. The depth of the sea presents an interesting problem. If the Atlantic was lowered 6,564 feet the distance from shore to shore would be half as great, or 1,500 miles. If lowered a little more than three miles, say 19,690 feet, there would be a road of dry land from Newfoundland to Ireland. This is the plain on which the great Atlantic cables were laid. The Mediterranean is comparatively shallow. A drying up of 660 feet would leave three different seas, and Africa would be joined with Italy. The British channel is more like a pond, which accounts for its choppy waves.

I TAKE 13 different educational journals, but THE SCHOOL JOURNAL is the best of all. I have a library of about 300 strictly professional books.

Texas.

W. W. GATEWOOD.

I HAVE an unbounded appreciation of the sound educational principles discussed in THE JOURNAL of Feb. 8; it is the champion of a just standard of the profession.

N. Y.

S. L. STRIVING.

CORRESPONDENCE.

Correspondence is welcomed, provided that it is written upon one side of the paper only, and is signed with real name and address. Many questions remain over until next week.

THE STATE'S BUSINESS.

To the Editors of THE SCHOOL JOURNAL:

Dr. Howard Crosby says that the state is doing work it has no business to do. It should teach children the three R's and the American constitution—no more.

But why teach even these at public expense? Why tax me to teach the children of others? What care I whether they can read or write? I am not responsible for their presence in the world, nor benefited by it. What right exists to tax me for their instruction?

Nay, more; a little learning is a dangerous thing. Is it not folly to give children that which makes them dangerous? Better let them continue in their happy, harmless ignorance. Why spend my money to make the children of other people dangerous and miserable? Does not education make people restive? Are not those states possessing the greatest quota of ignorance the most happy, prosperous, wealthy, and progressive?

Some day the people of Central Africa will have as much spent upon their education as those of England, France, and Germany. Is it not terrible to think of this?

The state has no business to educate. Let the people grow up like cattle and be happy. J. FAIRBANKS.

TEACHERS NEED FREEDOM.

The question in THE SCHOOL JOURNAL as to what education should do for a human being, I would answer something like this: A child, to be really educated, must, in addition to ordinary school information, understand the fundamental principles which govern his being. He must be fitted to enter upon life's duties with a firm determination to follow nature's laws (which are God's laws), with faith to believe that God can and will carry him safely through the many discouragements which beset the pathway from youth to old age. He must believe that health, happiness, and prosperity depend upon conformity to these laws. Along with the regular routine the young people should be taught self-government, because to be self-governed is to be able to govern others, and nothing is more necessary in our republic than that the citizens should be self-possessed, upright, and honorable. Believing all this, I would ask the JOURNAL to explain how a teacher can accomplish this, having just so many minutes in which to hear a recitation, having a course of study that must be rigorously followed, per order of school board, children to be advanced according to their ability to answer test questions from studies pursued, parents anxious that children should rank high in examinations. As for myself, although I employ every spare moment in conversation with my pupils upon matters not laid down in their regular school work, yet when a young man goes from my class out into the world for himself, I feel that I have missed an opportunity to minister to his real needs; that he has not been rightly dealt with. THE JOURNAL is the most interesting of all publications of the kind, and I think is a wonderful help to thinking teachers; so many hints are applicable to every-day work. I should miss it more than I can say.

S. GRACE DAVIS.

This is very clearly put. Changes must be made. (1) There must be more teachers; (2) there must be better teachers—those who can educate. This is the ground the JOURNAL has stood on for years, and the teachers must agitate those points. A teacher, just in this office, said she had 80 children in a small room. A farce is going on there. These who follow out the course of study, determined to get their pupils to have a high percentage on examination, are not doing the best for them they can. We advise to plan for the pupil's education; plan to make him a stronger, wiser, nobler human being. Have courage and use the course of study as a general plan—a plan that may be varied from.

SOME WORDS OF ADVICE.

I have been reading THE INSTITUTE for five months, and feel determined to make a professional teacher of myself. The thing now is, how shall I do it? I have saved up \$60. Shall I spend it on normal instruction? Or, shall I do my best to become a professional teacher where I am? My age is 21. What do you say?

L. C. M.

It is not easy to advise one and not know all the circumstances. In general, we should say to you as to a young man who intended to be a physician, "Go to a professional school." Hence we should say select a normal school that will give you professional training, and attend that and graduate. As to what, it is not easy to direct you. We regret to say that not all normal schools give professional training. Some scarcely discuss psychology, theories of education, etc. Some give little or no practice. You will do well to correspond with the schools in your state and out. The normal schools of New York state receive pupils from out of the state. Probably one year would enable you to graduate; \$60 will not carry you over a year; borrow the rest. If you are the man you seem to be, you should get \$100 per month when you graduate.

WANTS TO IMPROVE.—1. How can I obtain the good will of my pupils? 2. How can I teach current events in a mixed or ungraded school? 3. How can I better qualify myself for teaching? Mt. City, Pa.

L. M.

1. Love begets love. 2. Just as in a graded school. See several back numbers. 3. You must either go to school, or take THE TEACHERS' PROFESSION.

INTERFERENCE FROM PARENTS.—I have in my school a scholar whose parents are constantly meddling with my work. He tells me that his mother says he is to do or not to do a certain thing. One term he was not to study physiology—it was wicked.

H. L. W.

We have been there. The best thing is to use

sometimes to treat it lightly. Bring it out before the school: "What, wicked to study physiology! Why, we learn how not to get sick," etc. Then again, "Henry, you don't like to bring such messages, I know; none of the rest do it; but it is right, you should mind your parents."

AN EXCELLENT MOVE.

The suggestion often found in *THE SCHOOL JOURNAL* advising teachers to get together and talk over methods of progress in school work, has been very satisfactorily tried in Mount Kisco, Westchester county, New York. "Advancement" is our watchword, and every teacher is anxious for improvement.

The first meeting was on January 25, about forty being in attendance; Commissioner Adams was chairman. The commissioner said:

"My observation leads me to assert that the per cent. of poor work is very small. In time past we had teachers who were not competent, but these are disappearing. But there must be progress. Every teacher has something she may impart in the way of successful teaching that will benefit others."

A committee of five was selected to plan out an organization. Then followed an exercise in primary reading; a class was taught by Miss Ferris, a graduate of the Potsdam normal school; then a class exercise in intermediate reading, by Miss Eloise Newton, from the Albany normal school.

Miss Mills, from Bedford Station, gave some hints as to the necessity of a program. Miss Norris illustrated advanced work in reading.

Prof. R. F. Carr, of Chappaqua, was elected president; Miss Clara Clark, of Katonah, vice-president; Miss Addie Norris, of Mount Kisco, secretary and treasurer.

Prfn. Shields, of Katonah, discussed "Necessity of Order in the School-room." Mr. Shields is a graduate of the normal school at Potsdam, New York, and a very energetic and progressive teacher. His suggestions were very practicable and valuable.

[This looks well; the waters are beginning to move. This is a straw that shows which way the wind is going to blow. The general plan of this meeting is good. We would suggest it take the name of the "Westchester County Training School;" that the organization hold its meetings on Saturdays for the present, but that it train the third grade teachers for the second grade, the second for the first, and so on. All this for the present will require labor for little or no pay, but if the state sees real training work is being done, it will pay for it.]

MEANS TO ADVANCE.

How can one find time to do more than the work of the school? I am anxious to improve myself, but I get little time for additional work. I desire to advance as a teacher and as a man. My aim has long been to go through college. Four years ago I was very ill and got in debt. I am now nearly out of that, and hope to go to college next year. I want to do something for the benefit of humanity, and feel I cannot be too well-prepared. Your words have helped me to keep at work to prepare for college.

This man will, if health permits, do a good work. Whether he had better go to college to prepare for teaching is a question that has two answers. We should be inclined to say no. If a man has health and time, and does not care to get into teaching before he is 35 years old, let him go to college. Once a college graduate could get a place at once; now people ask him, "Have you learned the principles and practice of teaching?" A young man graduated from Yale College and could get only an inferior place. He then began to study education, has attended summer schools for five years, as well as lectures, etc. Now he says he "begins to see into it." Things are not what they were twenty-five years ago. We advise this earnest fellow to go to a first class normal school where time is given to the study of the science and art of education; not all so-called normal schools give this time. Until that can be done, let him do all the professional work he can. (1) Take THE TEACHERS' PROFESSION and see where he stands; that is, find out whether he is a first, second, or third grade teacher, and plan to advance. (2) Let him study the practice of teaching in his school-room. Send to E. L. Kellogg & Co. for "How to Conduct a Recitation," and see if he does as Prof. McMurray points out. Day by day let him teach and think. Let him ask himself daily, "Am I teaching in accordance with sound principles?" If he does this, it will be seen that he is not a second rate teacher; he will feel that he is not.

REMEMBER THE VETERANS.—Your recent note in *THE JOURNAL* regarding Miss Wright, principal of primary department of G. S. 55, shows us how quickly our services are forgotten. Miss Wright has been at work certainly forty years, and in that time has opened and organized two primary schools; she has had charge of three grammar departments of leading schools. The celebrated Twelfth street school was built for her, and she organized its grammar department, but left it to take charge of the first daily normal school. Since 1859, she has been at her present post. Now I ask, are we who have borne the heat and burden of the day, to be forgotten and despised by a new generation? TEACHERS.

It has been one of the features of the New York City schools that old teachers have never been thrust aside. We believe justice will be done Miss Wright—if the local board forget her, the central board will not.

AS TO THESE BOOKS.—What do you think of the moral influence of "Dr. Jekyll and Mr. Hyde?" of "Anna Karenina?" of "Robert Elsmere?" Are they good books? R. L. King.

Any book is a bad book to a man that upsets his faith in humanity, or tries to do it; if it makes him doubt whether

the world in general is not made by supreme wisdom, or if it tries to turn him away from his belief in God, and attempts to break him off from leaning on God as a Father. "Dr. Jekyll and Mr. Hyde" is a bad book because it teaches that one may be excused from sin if he has inherited traits to battle with. In "Anna Karenina" life is made hopeless, it talks as the suicide does; it ignores hope, the heavenly messenger. The heathen Greeks knew better than that. In "Robert Elsmere" what is right and what is wrong is made very uncertain; it seems to revel in putting a man into a dark and dismal cell of doubt.

NATURE.—Please recommend a natural history adapted to children from 7 to 9. Glenwood, Neb. H. M. S.

The "Child's Book of Nature," while not a natural history, is an admirable book. Every teacher should use it.

PSYCHOLOGY.—Can you give in *THE INSTITUTE* a number of questions on psychology for beginners, to be answered the following month? A SUBSCRIBER.

1. How do you know a knife is dull?
2. Can you know anything you have not seen, heard, smelled, tasted, or felt? Why?
3. How does a child first come to know anything?
4. Sometimes you hear something you cannot recall, soon after you heard it, and you say, "It has gone from me." What do you mean?
5. If you had seen a man hanged, would you say the next day, "It seems to me I saw something remarkable yesterday, but I cannot tell what it is?"
6. How do you know you are not somebody else? The question of what knowledge is, is a vital one.
7. How do you determine the difference between a horse and a cow?
8. What do you mean by "knowing a thing"?
9. Do you know anything? What?
10. How do you know that you know?

WRITING.—Please tell me the best time for a writing exercise. Is it in the forenoon or afternoon, what hour? W. H. P.

It is generally fixed for the exercise before recess in either forenoon or afternoon. Many excellent teachers now use the entire time before recess—once a week.

TEACHING MEXICANS.—I am teaching Mexican children. Would you attempt to teach them anything but reading, before they have learned to read? Please give method of teaching them. C. W.

Show them an object, as a hat. Pronounce the name; they will do so; write the word; try to have them do it. Show, give name, write. Do this with several objects—hat, dog, cat, boy, etc. Then take a word like "black." Saying the hat is black—show something else black, and so go on. We saw a school of Mexicans where the children could read and yet did not know what was meant. Of course some things must be taught before reading; talking, for example.

MORE AS TO FRACTIONS.—Please give me a good explanation for the reduction of fractions to their lowest terms. R. M.

The best way is to show the pupils a circle, for example; then cut it into halves and write on each $\frac{1}{2}$. Now cut another into fourths and write on each $\frac{1}{4}$. Now show that $\frac{1}{2} = \frac{2}{4}$. Then show that it is obtained by dividing both terms of the fraction by 2.

TEACHING READING.—Please give some hints for teaching reading, especially a fourth reader class in a district school. My pupils are interested in reading stories, etc., but several read entirely too fast, some in a sing-song, and others in a hesitating manner; of course, part of the class read well. I use the reproduction stories, also current topics. The latter we want more of. L. McC.

To give the correct speed read in concert; the sing-song comes from not understanding, and from hesitancy. See that they get the thought. Get Parker's "Talks on Teaching."

GRAMMAR.—Parse all in the sentence: "We all went home." Also parse in "It was no one else." And, each and other in "They love each other." A. C. WEBB.

If the pupils compose a feeble Third Reader class, hardly able to master the meaning of the author, we should be averse to showing them the trick of parsing anything. "All" is an adjunct of the subject. "Else" is an adverb modifying the predicate. They each love the other; "each" adjective modifying "they." We don't like to crack nuts.

SHORT-HAND AND TYPE-WRITING.—1. Please name the best work on short hand. 2. What is the price of a first-class typewriter?

1. There are several systems of short-hand, and the users of each consider it the best; so that your question cannot be positively answered. 2. \$100. There seems little hope of the best machines lowering in price, until the patents run out. S. W. M.

POPULATION NEEDED.—What do you think of a training school in one of the Rocky mountain parks next summer? There is much need of one. W. J. WISE.

Should say it would be too far from civilization. The training school must have children to observe—a class of them.

EDUCATIONAL NOTES.

THE international copyright bill is again before Congress. Mr. Bovee showed that the bill would make English books dearer (one that cost in England \$1.50, was sold here for 20 cents); so Mr. George P. Putnam said in favor of it that there are a number of valuable foreign books that would be sold here if the publisher had protection. Judge Armoux was against it—it would create a monopoly.

AMERICAN doctors are having a hard time in Germany. The telegraph tells us that the two hundred American physicians, matriculated at the University of Berlin, are greatly agitated over the refusal of the German authorities to recognize their American diplomas in the recently issued university calendar. While the medical degrees of all other nations are duly recorded, those conferred by institutions in the United States are entirely ignored. In explanation of the omission, a high official attached to the ministry of education to-day said:

"Your American colleges don't come up to our German standards by any means, and are too various and miscellaneous in their character to claim recognition." American physicians here are never advertised by their titles, nor are their letters so inscribed, although there are in Berlin graduates of several of the leading American medical colleges. It is proposed by the ignored medicos to prepare a memorial to the authorities expressive of their astonishment and indignation at their treatment. But in the meanwhile would it not be well for our medical colleges to elevate their standard of admission? Do they not admit too many callow young men into their classes? It is our opinion there is room for a little bracing up in this direction.

DR. JOHN HANCOCK, state commissioner of common schools, of Ohio, has written a letter to Supt. Howland, of Chicago, endorsing his position on "inductive or experimental teaching." He declares that Mr. Howland used "good, brave words," yet with a touch of sadness he "supposes" that both Mr. Howland and himself will be "classed as old-fogy conservatives," but he consoles himself that he is in "mighty good company." We do not wonder that Mr. Hancock's statements nearly took Mr. Vaile's breath away.

We respect any man who has the courage to stand by his convictions. Although we are sorry that both Mr. Howland and Mr. Hancock cannot see what we believe to be the truth, yet our regard for them as honest educational workers, is increased rather than lessened. Mugwumps have no place in this battle.

NORTH DAKOTA is the first state in the Union to provide for a school of manual training and industrial education. The new constitution provides for such a school at Ellendale, with a grant of 40,000 acres. The "new education" wave does not seem to be subsiding. What do the fossils say to that?

WE note in the course of study in the Chico, California, normal school that there are professional studies from the top to the bottom. What would those normal schools think of this, that give a few weeks to pedagogy in a two years' course? It is mentioned in the circular that the students have opportunities to see teaching done all through the course. We should expect this, for President Pierce is imbued with sound ideas.

MR. THOMAS W. BICKNELL, formerly editor of the Boston *Journal of Education*, has purchased the *Dorchester Beacon*. *Dorchester* is a fine suburb of Boston, and Mr. Bicknell will make the *Beacon* a good paper.

THE *Journal of Education*, London, quotes our remark: "The most formidable obstruction in the way of the coming school is our habit of placing young and inexperienced teachers in charge of primary classes, where breadth of thought, definiteness of plan, and skill in execution, are infinitely more needed than in the subsequent work. . . . To continue the practice of placing the weakest teachers where the strongest are needed, is the greatest pedagogical error of our day," and also what we said later, that "the education of a vast number of children is in the hands of well-meaning, perhaps, but incapable persons; this is a legacy the past has left us, and the worst thing is that it is accepted with hardly a protest." The *Journal* then says: "Heartily do we sympathize with the writer when he adds: 'The lost

money may be replaced, but the precious youth of children will never return.' The way in which the life and powers of children are wasted is one of the most melancholy things we know." This latter remark is painfully true on both sides of the Atlantic, and we are glad to know that in England there is a journal fighting, as we are in America, to stop this waste.

MISS BESSIE CADY, who evidently is doing her best under some difficulty, writes an interesting letter to us in criticism of Prof. Griffith's article upon the "First Day in School." She is a country school teacher, and she does not believe that her pupils are capable of appreciating—of receiving—the methods there suggested. Many of them could not read matters placed on the blackboard "the first day of school," and, if they could, would be unable to give their own names, their parents, age, and so on. Miss Cady very wisely suggests that "residence" is a rather long word for pupils of six and seven years. Difficulties like this confront all teachers; what is suitable for one school is totally unfit for another, and it is the excellent teacher that can point out, in this clear manner, the troubles that she has to face, and can adapt broad principles to narrow circumstances. Prof. Griffith is solving many knotty points in his articles, but he cannot, nor can we, hope to solve all. Miss Cady meets other problems, and, we are convinced, solves them with some success. We want her, and all teachers, to send word to us every time they have mastered a difficulty, and tell us just how the trick was done. But no ready-made recipe can be given, by which all difficulties may be overcome.

THE thirteenth annual session of the Martha's Vineyard summer institute will begin on July 14. The School of Methods will be open three weeks and the classes in elocution four; while the academic department will continue until August 15. The number of lecturers and instructors is large, and the quality good. Prof. Woodhull, of the College for the Training of Teachers, will give lectures upon home-made apparatus in natural science, a subject that our readers must realize his ability to handle. Prof. Woodhull will later be at the Glens Falls summer school, where Dr. E. E. White, of Cincinnati, will have classes in psychology and pedagogics, and Miss Caroline T. Haven, of New York, in kindergarten work. These are but three of the notable names in the Glens Falls list. The school will open on July 29 and continue three weeks.

THE "School-Masters' Round Table" will meet at Clinton, Iowa, March 7 and 8. On Friday the Clinton schools will be visited, after which sessions will be held for the discussion of various subjects of interest to thinking educators. These subjects, judging by the list before us, will be largely practical. They include free text-books, supervision, compulsory attendance, hygiene, and the special training of teachers.

BROOKLYN is increasing her school buildings. Last week public school No. 65 was opened under the principalship of Mr. A. A. Ashman. It is an admirable building; there are twenty class-rooms.

THE authorities in Australia have begun to wonder whether their schools are as good as they seem. Their system is very completely organized, and they have graded teachers' examinations, and fine school-houses, and pensions for the aged, and many other good things; but a spirit of investigation is abroad, and the investigation is developing some disagreeable facts. Two of the most prominent educators have been devoting months to studying the schools, and they have discovered that while the pupils in Victoria can pass higher (and do pass more) examinations in a given time, those of New South Wales have more "brightness of manner" and more "quickness of thought," and "undoubtedly advance more rapidly." Further, their teaching is "freer and more intelligent," while in Victoria there is a "narrow range of examination that cramps individuality." The Australians, having found this out, are going to do something about it. Many of us have discovered the same thing in America; are we all doing something?

THAT the Australians need a good deal of light, however, we judge from some queries in their leading educational journal. One teacher asks, "How are the auxiliaries of what used to be the potential mood to be parsed? Example, 'We might go to-morrow.'" Another says, "Parse 'even' in 'Even children followed,'" etc. These puzzles our distant contemporary

attempts to solve, adding, in the first case, "It is a matter of small importance, and EITHER (solution) WOULD BE ACCEPTED. In the second case he says again, EITHER VIEW WOULD BE ACCEPTED. Is grammar taught in Australia simply with a view of getting one's answers "accepted" by the board? It looks that way; and just there is the danger. That spirit causes the value of both good English and mind-training to be forgotten in the mad rush to get the pupils' answers "accepted." That is the spirit that the Australians—and some other people we know—must eradicate.

THE Rev. D. J. Waller, formerly principal of the state normal school at Bloomsburg, has been appointed state superintendent of public instruction of Pennsylvania. The appointment is an excellent one, for Prin. Waller has always been in line with advanced ideas. Indeed Pennsylvania was fortunate in having several men at her disposal, each of whom would have been an excellent superintendent. We congratulate the appointee and the schools of the state.

FOREIGN NOTES.

BERLIN.—An educational paper, edited by a woman, and read almost exclusively by female teachers (*Die Lehrerin*, Leipzig), publishes some curious figures. In Prussia the average salaries of teachers have during the last eight years decreased in every province; chiefly through the employment of women. The decrease has been 8 to 235 marks since 1876.

VIENNA.—Instead of 0.4 per cent. of carbonic acid gas (the percentage found in the atmosphere outdoors) the air commonly found in dwellings contains 1 per cent.; in a school-room the amount sometimes rises to 7.3 per cent. within a three hours' session; during a two hours' afternoon session it was found to rise from 5 per cent. to 8 per cent., and if a singing lesson is given, the amount of carbonic acid gas rises to 9.3 per cent. Let it be said here, that the schools of Vienna are splendid palaces, and as a rule well ventilated. Nine per cent. of deadly poison in the air; just think of it! No wonder boys play truant.

COPENHAGEN.—No class-room in the city schools has more than 35 pupils; the number varies between 28 and 35. The cloak-rooms are separate, so that no evaporation from moist garments may vitiate the air. The city school authorities furnish towels and soap, and everything is done to make the schools what they ought to be.

TO HELP THE MESSENGER BOYS.

ADMIT BEARER
TO A
TELEGRAPH BOYS' TEA.
ON
TUESDAY, FEB. 4, 1890,
AT 8 o'clock, P. M.
PILGRIM CHURCH, NEW YORK,
Madison avenue and 121st street.
Please come in uniform. Bring this ticket.

These words were printed on green tickets which were presented at the door of the Pilgrim Congregational church, on a recent Tuesday evening. Within, the lecture room was crowded with messenger boys of all ages. The pastor, Dr. Samuel H. Virgin, opened the exercises with prayer, and then explained that the tea was the beginning of an association that had been organized to help messenger and telegraph boys to become good, useful men. After some more speech-making and singing, the boys were liberally helped to cake and ice cream.

This work has been inaugurated so quietly that only a few people have heard of it. It began in London two years ago, under the auspices of Miss A. F. Syngé and two other young ladies. They succeeded in coaxing the boys together and taught them writing, reading, arithmetic, and French. Before long the work obtained the support of the government, and the officers promised to advance those boys who did well in the association. The society now includes the post-office employees, and is known as the "Postal and Telegraph Christian Association." Later, when the work had spread to Scotland, Canada, Australia, and Cape Colony, the word International was prefixed to the name.

The fees of the association are only twenty cents a year. The members are required to pledge themselves to abstain from bad language and intoxicating liquors, and to promise to be truthful and help their brother members. Prizes for progress in studies are to be awarded at the end of the year.

THERE is something in your publications that awakens careful and thoughtful study in teachers, and causes them to work. You have hit me in some of my weak points, and caused me to cast about for something to improve myself.

E. O. C.

NEW YORK CITY.

THE People's Mission, No. 97 Varick street, beginning its thirty-first year, appeals to the public generally for donations, for the year 1890. Besides its religious and charitable work it settles, in various ways, over 25 legal cases weekly for persons unable to defend their just rights. Six attorneys co-operate with the general superintendent in the work. Hon. Noah Davis, Wm. Allen Butler, and Henry Day are the special advisers in difficult cases. Many of the clients need charity as well as legal protection; some of them are very destitute. Rev. C. C. Goss is the general superintendent.

THERE is to be erected a new building, 100 feet square, to contain a hall and offices for the use of the school officials of the city. The site favored is at the corner of 58th street and Park avenue. A library will be included in the plans of the building.

THE Agassiz Association will hold a convention on Thursday, Friday, and Saturday, of next week, February 27 and 28, and March 1. The meetings begin, under the auspices of the New York Assembly, on Thursday evening at the Friends' seminary, Rutherford place. On Friday afternoon an opportunity will be given to visit the College for the Training of Teachers, where, at 4 o'clock, there will be addresses by Prof. H. H. Ballard, of Massachusetts, president of the association; Profs. Woodhull and Hervey, and Dr. Jerome Allen, of the University School of Pedagogy. At 8 p. m. Chapter 949 Z gives an exhibition at 49 W. 20th street. On Saturday, at Columbia College, morning and afternoon, the speakers will be Profs. Ballard, Newberry, Britton, and Bjeerregaard, and Mr. Geo. F. Kunz, while in the evening, at the Museum of Natural History, Prof. Bickmore will speak on British Columbia and Alaska. Teachers are invited to attend these sessions, particularly those at No. 9 University place and at Columbia.

MR. and MRS. EDMUND RUSSELL have recently returned from three years' lecturing and teaching abroad, having met with success in London for three seasons. Prominent art critics and scholars of Europe have given tribute to the power of their teaching.

Mr. Russell has expounded "Delsarte—his Discoveries a Basis for critical Art Study," "Color and House Decoration," and "Dress." Mrs. Russell has expounded "Gesture," "Grace and how to get it," "Walking and Bowing," "Expression in Oratory," etc.

Mrs. Russell has mastered the ideas of Delsarte, so that she seizes upon the confidence of every one of her hearers in a remarkable way. They feel that she speaks the truth. The beginning of these lectures was not auspicious; they were not advertised, but the audiences increased until at the last the hall was filled. Just as they were to end, the people discovered their value. It is probable that another series of lectures will be called for.

TEACHERS WANTED.

WANTED.—Lady teacher of Sciences, for city school. Salary \$1,000. Graduate of Smith, Wellesley, or Vassar preferred. One who has had at least three years' experience in teaching Chemistry (analysis), Botany, and Physics. Apply with full particulars to H. S. Kellogg, 25 Clinton Place, N. Y.

WANTED.—Normal graduates, ladies, for positions in graded and ungraded schools, at \$400 and \$450. Apply to H. S. Kellogg, 25 Clinton Place, N. Y.

WANTED.—One or two experienced Critic and Training teachers for Normal Schools. Salaries \$800 and upward. Ladies for Primary, Intermediate, and Grammar grades. Apply with full particulars to H. S. Kellogg, 25 Clinton Place, N. Y.

WANTED.—Correspondent for the New York Educational Bureau in every County in the United States. For further particulars write to H. S. Kellogg, 25 Clinton Place, N. Y.

I HAVE been taking THE JOURNAL during the past year and it has been my most properous year; THE JOURNAL has contributed largely to my success. THE INSTITUTE was my first educational paper; it brought me out of a country school into a graded school, and hence I remember it as an excellent friend. THE JOURNAL has discussions on momentous questions.

Mich.

J. M. HAINES.

All humors, boils, pimples, and like blood disorders are cured by Hood's Sarsaparilla.

BOOK DEPARTMENT.

NEW BOOKS.

THE HEROES OF THE CRUSADES. By Amanda M. Douglas. Boston: Lee & Shepard; New York: Chas. T. Dillingham. 12mo. 350 pp.

The author quotes in her dedication the phrase "a noble life is better than a heroic death;" but the lives of the crusaders, however true this may be, must always remain better material for the writer of children's stories than the lives of noble men who merely stayed at home. This is probably the excuse that would be put forward for publishing this volume, if any were asked for. It treats a popular subject in a popular way, it is written in simple, if sometimes inelegant language, and it contains many soul-stirring illustrations. It will probably sell well. It is not history, yet it is not fiction; it refers to no authorities, yet it does not (surely it does not!) profess to be itself an authority; it is simply one of those happy-go-lucky, machine-made books, that aim to be neat enough to sell well in the book-stores. The total lack of research, of historical methods, is shown in numberless instances. Opening the book at random, we find (p. 139) that "Shawer agreed to pay the Christians 100,000 pieces of gold annually." Of what value is such a statement? "In 1157 the Turks accused the Franks of some breach of the treaty;" (p. 133) why not attempt to ascertain what breach? Did the author weigh her words when she spoke (p. 14) of "the two greatest monarchs the world has ever seen"? We think this is phrase-making. We doubt if the phrase would suggest to a dozen out of our thousands of readers, the two monarchs intended—Charlemagne and Haroun-Al-Raschid. We do not wish to condemn this book, for it is in many respects attractive and readable; but we desire emphatically to protest against the class of work to which it belongs—the undigested gathering of facts (and fancies) into a volume of so many pages that will sell for so much. Had the author revised the illustrations with sufficient care to exclude nineteenth-century rigging from the crusaders' ships, and to eliminate many gross exaggerations, the book's defects would not be so glaring.

THE PUBLIC SCHOOL MUSIC COURSE. By Charles E. Whiting. In Six 12mo. Volumes. Nos. 1 to 5, 112 pp., 25 cents each; No. 6, 256 pp., 54 cents. Boston: D. C. Heath & Co.

A well-graded course of instruction in vocal music has become a desideratum without question; and here it is. The first and second books are for primary grades, and take up, of course, the most elemental matters—the notes, the scale, time, measures. The method is inductive; the teacher is instructed to begin the first lesson by singing a scale. (Any one, by-the-way, can learn to sing a scale.) The progression is very slow, but very sure; each step seems founded upon the step before. The simplest airs, in unison only, are introduced very soon, and thereafter used with freedom, but always for purposes of illustration. Half way through the first book two-part singing is begun; rather abruptly, it seems to us, and we would suggest that from the first the teacher introduce a second in his own singing whenever he finds the class "in full swing" with the air. This will create a sense of harmony and a curiosity about it. The second book is developed on the same lines as the first. Both these are neatly and attractively illustrated; and each volume of the series begins with a review of what has gone before. In the third book the various major keys are made thoroughly familiar, accidentals introduced, and further steps taken in regard to time. Book four brings in the minor scales and chords, introduces a third part in the songs, and continues the previous work, which the fifth volume practically completes with the introduction of the bass clef and all the solfeggios. Finally, the sixth volume contains a brief, but sufficient outline of all that need be taught a child in the way of vocal music, and includes many airs, choruses, glees, and so forth, leading up to the most advanced four-part singing. These books are well made. Their plan and scope leave little to be desired; and mechanically they are remarkable, the print—so important in small volumes of music—being clear and distinct, and so far as we have observed, accurate. In one particular the author might have done better, by introducing a few songs that would appeal more directly to children. The standard college songs—even "Billy Magee Magaw,"—would have lightened the pages, from the child's point of view, and brought the classes to their next music lesson with more enthusiasm than can be produced by the finest music in the world. Fine music, and a love for it, are greatly to be desired; but child's music must be varied, or there will result a love for no music. The selections here are good, very good; but they might be better. We would not advocate lowering the standard, but from a child's popular air to Wagner and Beethoven, there is a gulf that cannot be cleared at a jump; it must be navigated. The young sailor needs fair winds and grateful airs at first. Nor must it be forgotten that there is nothing offensive in the words of most college songs, while their airs are often from the very best German sources.

HISTORY OF UTAH. By Hubert Howe Bancroft. San Francisco: The History Company, 1890. Royal 8vo. 806 pp.

Mr. Bancroft's superb collection of materials relating to Pacific slope history, his indefatigable energy, and his genius as a compiler (rather than as a historian), enable him to produce these volumes with a celerity and regularity that is simply astounding when their real merit is discovered by investigation. The history of Utah is of necessity the history of Mormonism, and is therefore a distinct field for the author of the standard histories of the Pacific coast, of Texas and northern Mexico, of Colorado, Idaho, Montana, and the rest; yet Mr. Bancroft has entered this field with the same energy and self-confidence that have carried him through so many thousands of pages hitherto. With the history of Mormonism he has dealt unsparingly in the best sense; for he has spared neither the Mormons nor their bitterest foes, and has given us a complete account of all that has been said and done, both for and against the peculiar sect. His method of doing this shows that he is not writing history, but merely compiling its materials; he gives an account of the church from the church's viewpoint, and in foot-notes the criticisms of "Gentiles" upon the matter. Imagine Macaulay writing an account of the Puritans from the Puritan viewpoint, and consigning to a foot-note the remark "Sir John Jones (X, 121) suggests that the Puritans hated bear-bait-

ing, not because it gave pain to the bear, but because it gave pleasure to the spectators!" But future historians of America—its future historian, let us say—will owe a great debt to this Bancroft—greater, perhaps, than to the Bancroft who is really a historian. He need not go beyond these volumes to get the facts about our Western country, yet if he wishes to do so, he will find here also a marvelous list of references to every conceivable form of original authority. This is the real value of Mr. Bancroft's work. The volume before us comes through the politeness of Willford Woodruff, Esq. We have found it as readable and interesting as can be a writing so studiously inornate and chronicle-like.

MODEL METHODS OF TEACHING COMPOSITION. By John G. Donaldson. New York: John B. Alden. 16mo. 134 pp.

This little work proves that the advanced views upon education, in the matter of teaching grammar, are making headway. We find here no rules intended to be given to children, and only a few explanatory generalizations for teachers; yet the methods adopted would indubitably lead a pupil to feel more grammar in a few months than some teachers know—or practice—after years of toil. Each lesson is suggested, and much is left to be filled out; but the suggestion is always accompanied by a practical example. The first lesson is a list of 16 words (to be extended indefinitely) such as map, book, stove, crayon. Write A before these words. That is all. Then write The before others. Write A or An (which?) before still others, for a third lesson. (Thinking begins here.) The same kinds of work, and sentences with blanks to be filled, are carried through two years, the inductive method being used to establish a feeling about nouns, verbs, punctuation, etc. In the hands of a clever and careful teacher, there is immense benefit to be derived from this volume, small as it is. A few trifling criticisms, upon matters of phraseology, might be made, but they do not detract from the value of the book as a guide to teachers.

CONCERT TEMPERANCE EXERCISES; or Helps for Entertainments. Collected and Edited by L. Penney. New York: The National Temperance Society and Publication House. 16mo. 160 pp. 50 cents.

This is a collection of exercises suitable for use in schools and elsewhere. They are quite numerous, and are adapted for various numbers of children, from two up to twenty or more. Some of the verses are quite good, and the dialogues are cleverly arranged.

REPORTS.

REPORTS OF THE SCHOOL COMMITTEE AND SUPERINTENDENT, For the Year 1889. Springfield, Mass.

This report is noteworthy for the great space and close attention given to manual training—fully one half of the pages being devoted to that subject. The committee is enthusiastic in praise, and gives place to a most elaborate statement, of the work done and the methods and utensils used at the "Springfield Manual Training School," an institution to which are sent either daily or semi-weekly, both the pupils and the teachers of the other schools in the city. The school has, in its wood-working department, 17 benches, each thoroughly equipped with no less than 45 tools. Diagrams explain the arrangement of tools, benches, drawing-tables, etc., and an outline of course in wood-working for beginners is given, extending through fourteen lessons. In further pages of the report appear some very exquisite designs, used as problems in the classes. In fact this part of the Springfield report makes that pamphlet of permanent and important value. A copy of it should be in every school that looks toward manual training as a means of better education—and this ought to mean every school in the country.

MAGAZINES.

Harper's Magazine for March has in its series of articles on the armies of the great powers, a handsomely illustrated one on "The Army of the United States," by Gen. Wesley Merritt. Dr. Samuel Kneland, in a paper on "Manila and its Surroundings," furnishes an account of the little-known islands lying in the great earthquake belt. George William Curtis relates some personal reminiscences of the late Robert Browning in the "Easy Chair." Rose Hawthorne Lathrop, Gerald Massey, Joseph B. Gilder, Charles Washington Coleman, and Florence Henniker contribute poems. Charles Dudley Warner reviews the wars of the rose and the chess-throne.

The *March Atlantic* contains a bright article on electricity, a subject that is engrossing so much of the attention of the civilized world. Giordano Bruno, who usually brings tears of pity to the eyes of one class of thinkers, and tears of rage to another, is discussed in this number. Dr. Holmes, in his installment of "Over the Teacups," gives some hard knocks at the class of people who believe themselves poets because they try to write verses. "Loitering Through the Paris Exposition" gives a vivid impression of the actual life of the place.

La Revue Francaise, published at 39 West Fourteenth street, New York, has "The Military Genius of Joan of Arc" for its leading article in the March number. The next and all future numbers will be illustrated.

The *Chautauquan* for March has so many good things that we will attempt only to mention a few of them. George Gunton, a man who has made a great stir recently among thinkers, writes of "Trusts and How to Deal with Them." A good idea of Browning's place in literature may be got by reading John Vance Cheney's article in this number. J. Ranken Towse treats of "English Politics and Society."

In *Scribner's* for March are some interesting facts about the Florida Seminoles. It says that an immense turban is the universal masculine head-dress and distinguishing badge of that tribe. It is sometimes set off by a single graceful plume of the white heron. The Ericsson paper includes a series of autograph pencil drawings, showing features of the inventor's monitor system as originally conceived. Prof. William James, of Harvard, gives some remarkable features of hypnotism. Horace Baker describes the boomerang and the method of throwing it.

The *Educational Gazette* comes to us from that far-off land, South Australia. It is a matter of pride with us that the sun never sets on the English-speaking races, and hence we gladly welcome this foreign visitor. Its typographical appearance is handsome, and its contributions and selections of a high order.

The February *Academy* has the report of the holiday conference of the Associated Academic Principals at Syracuse, December 28 and 29, 1889.

Shakespeareana for January has a portrait and sketch of that noted scholar, J. A. Halliwell-Phillips; also "Vandalism at Stratford-upon-Avon," and Mrs. Stowe's "The Bacon-Shakespeare Question."

In the February *Transatlantic* Zola and Sarcey express opposite views regarding Tourgenieff's play, "Bread of Another." S. Michashevsky sketches "Progress in Persia," showing that the East is treading close upon the heels of occidental civilization.

Dr. Albert Shaw, of Minneapolis, contributes to the March *Century* a very important paper on "Glasgow: A Municipal Study." Prof. Ely, of Johns Hopkins University, believes that it will be of immediate and practical assistance in the improvement of some of our American municipal governments.

Harper & Bros. publish "Jupiter Lights," by Constance Fenimore Woolson, a powerful story that deals mainly with Southern life. It originally appeared as a serial in *Harper's Magazine*.

ANNOUNCEMENTS.

FORDS, HOWARD & HURLBURT's recently published book, "An Appeal to Pharaoh," put forth as a "radical solution of the negro problem," is causing much discussion.

D. LOTHROP Co. publish a very useful book, "Our Asiatic Cousins," by Mrs. Loenowens, devoted to descriptions of the Hindus, Parsees, Egyptians, Phenicians, Chinese, Koreans, the "Dragon-Fly folk" of Japan, the Malays and their kin, the people of Cambodia and Siam. The author for many years occupied a unique position at the court of Siam.

HOUGHTON, MIFFLIN & Co. issue a promising book from the Riverside press in W. W. Story's "Conversations in a Studio," which discusses in a delightful way many questions in literature and art.

GINN & Co. number among their recent publications, "Handbook of Rhetorical Analysis," by Prof. John F. Genung; "Elementary Number Lessons," tablets I. and II., by F. B. Ginn; "Our World Reader," No. 1, by Mary L. Hall; "The Leading Facts of French History," by D. H. Montgomery.

J. B. LIPPINCOTT Co. publish the long-looked for book concerning Henry M. Stanley and his rescue of Emin Pascha.

JOHN WILEY & SONS announce "A Technical Dictionary," defining the terms of art and industry, by Park Benjamin and "Dame Wiggins of Lee," edited by Ruskin, with new illustrations by Kate Greenaway.

D. APPLETON & Co. announce Darwin's "Voyage Round the World," "Five Thousand Miles in a Sledge," a mid-winter journey across Siberia, by Lionel F. Gowling; "Exercises in Wood-Working," by Dr. Ivin Sickles; "Hygiene for Childhood," by Dr. Francis H. Rankin; and "Evolution of Man and Christianity," by the Rev. Howard MacQuarrie.

THE CASSELL PUBLISHING Co. announce three editions of the "Journal of Marie Bashkirtseff." The one they first issued at two dollars has been reduced to one dollar and fifty cents; there is another in plainer binding at one dollar, and a third in paper at fifty cents.

G. P. PUTNAM'S SONS have in preparation the writings of John Jay, which will be issued in four volumes, uniform with their handsome edition of the works of Hamilton, Franklin, and Washington.

MILTON BRADLEY Co. offer a drawing kit which we are sure all teachers will appreciate. It consists of a small drafting-board with T-square and two triangles. We are certain that many a pupil's eyes will sparkle as he sees this neat drawing outfit.

THE WRITERS' PUBLISHING Co. announce the "New York State Directory of City and County School Superintendents; Principals of High Schools, Graded Schools, Academies, and Normal Schools; with a carefully selected list of prominent District Teachers; and a Complete List of Public Libraries."

THE CARE OF THE TEETH.

If the teacher gives instruction respecting the teeth, he will be remembered. A gentleman who has filled many important positions, speaking often to public gatherings, says that he feels more obliged to a teacher who was interested enough to make suggestions concerning his teeth than to any other. He said, "I was sixteen or seventeen years of age, and had never used a toothbrush. It was not the custom then. The teacher that year took particular pains to give talks on health, on bathing, on walking straight, on sleeping with open windows, on proper food, on behavior, on politeness—things that had been wholly neglected. He spoke about the ill-looks of those who had lost their teeth, and the importance of having them filled. Now my two front teeth had already begun to decay. Standing near him one noontime he kindly urged me 'to see to my teeth,' saying, 'You may stand before large audiences yet.' I laughed at this, but it turned out to be true. I had those teeth filled at a cost of seventy-five cents, and they are sound and handsome yet."

Very few know the skill which the dentist now employs to save the teeth. Dr. W. J. Stewart, of West 23d street in this city, who is widely known as the "teachers' dentist," says that there is now ten times the effort made to save the teeth that there used to be formerly; that very sensitive cavities can be filled first with something soft, which in a few months is removed, and a hard filling substituted. Thus the pulling out of teeth is avoided.

Many a young man or woman has his or her progress stopped by the effect on the personal appearance of one or more missing teeth. This in turn affects the health. In the Passmore seminary the principal investigates the condition of the teeth monthly; very many of its graduates are women of eminence as teachers.

THE TREASURE-TROVE is a monthly magazine published at one dollar per year. It is devoted to amusing boys and girls, and to helping the teachers in their work of interesting children in what is desirable and praiseworthy. Among recent illustrated articles of special interest that show the wide-range of the TROVE, are those upon diamond-mining; upon the Montezumas; upon the "New Republic" of Brazil; while the future numbers will strive to excel those of the past, in interest and value. Nothing is of greater assistance to the teacher than to have a good children's magazine in the hands of his pupils; and TREASURE-TROVE, for this purpose, is the very best, while the children themselves await its monthly visits with impatience. It will be sent with THE SCHOOL JOURNAL for \$3.00, or with THE TEACHERS' INSTITUTE for \$1.80.

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FOR

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This book supplies information that is contained in no other single volume, touching the progress of education in its earliest stages after the revival of learning. It is the work of a practical teacher, who supplements his sketches of famous educationists with some well-considered observations, that deserve the attention of all who are interested in that subject. Beginning with Roger Ascham, it gives an account of the lives and schemes of most of the great thinkers and workers in the educational field, down to Herbert Spencer, with the addition of a valuable appendix of thoughts and suggestions on teaching. The list includes the names of Montaigne, Ratich, Milton, Comenius, Locke, Rousseau, Basedow, Pestalozzi, and Jacotot. In the lives and thoughts of these eminent men is presented the whole philosophy of education, as developed in the progress of modern times.

Contents: 1. Schools of the Jesuits; 2. Ascham, Montaigne, Ratich, Milton; 3. Comenius; 4. Locke; 5. Rousseau's Emile; 6. Basedow and the Philanthropin; 7. Pestalozzi; 8. Jacotot; 9. Herbert Spencer; 10. Thoughts and Suggestions about Teaching Children; 11. Some Remarks about Moral and Religious Education; 12. Appendix.

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A Noble Roman.—When Pyrrhus, King of Epirus, was assisting the Greek colonists in southern Italy, to beat back the invading Romans, Fabricius was sent to this king's camp on a mission. Pyrrhus offered him "more gold than Rome ever possessed," if he would enter his service, but Fabricius replied that "Poverty, with a good name, is better than wealth." Afterward the physician of Pyrrhus offered to poison the king, but Fabricius sent him back in irons.

Mt. Parnassus.—In Greek mythology this mountain is famed as having been one of the haunts of the Muses.

What was the Saturnalia? A Roman festival in honor of the free and golden rule of the ancient Saturn, that was held in December. It was a time of general mirth and feasting. Business was suspended, wars were forgotten, criminals had certain privileges, and slaves were permitted to jest with their masters, and were even waited upon by them at table: hence the word "saturnalia" has come to mean a period or occasion of general license.

Who was Attila?—King of the Huns, who, with half a million savages, set forth westward from his wooden palace in Hungary, vowing not to stop till he reached the sea. He called himself the "Scourge of God," and boasted that where his horse set foot grass never grew again. On the field of Chalons (451 A. D.) Attila, the Roman general in Gaul, and Theodoric, king of the Goths, arrested this Turanian horde, and saved Europe to Christianity and Aryan civilization. The Huns were Mongolian Tartars.

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The Egyptian "Book of the Dead."—This was otherwise called the "Book of the Manifestation to Light." It contained the ritual for the use of the soul in its journeys after death, and a copy more or less complete, according to the fortune of the deceased, was enclosed in the mummy-case.

What Messenger from a Battle Dropped Dead?—Phidippides, the swiftest runner in Greece, after the battle of Marathon, ran to Athens, a distance of twenty-two miles, with the tidings. He had had only breath to tell the news when he fell dead in the street.

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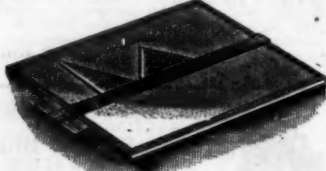
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